

STIC Search Report Biotech-Chem Library

STIC Database Tracking Number: 139983

TO: Terra Gibbs

Location: REM-2D10/2C18

Art Unit: 1635

Thursday, December 09, 2004 Case Serial Number: 09/661658 From: Paul Schulwitz

Location: Biotech-Chem Library

REM-1A65

Phone: (571)272-2527

paul.schulwitz@uspto.gov

Search Notes

Examiner Gibbs,

See attached results.

If you have any questions about this search feel free to contact me at any time.

Thank you for using STIC search services!

Paul Schulwitz Technical Information Specialist STIC Biotech/Chem Library (571)272-2527



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SCORE OVER LENGTH SEARCHES

Attached is a score over length search. This search was developed to overcome limitations in most standard search systems which favor large sequences with high scoring, but lesser overall identity over smaller sequences with higher overall identity. This search is especially useful for relatively small nucleic acid or polypeptide target sequences (antisense, fragments, probes, primers, RNAi, epitopes, haptens, etc.) claimed functionally via a form of hybridization and/or identity language and having defined upper and lower polynucleotide and or polypeptide length limits.

The score over length search is performed by first running the query sequence using examiner-specified identity and polynucleotide or protein length limit parameters, and saving 65,000 hits and 0 alignments from each desired database. The resulting output is reformatted using a Microsoft Word macro and is imported into Excel. The summary table data are then sorted by the ratio of score of each hit sequence divided by its length and the accession numbers for all hits below the examiner's desired score over length parameters are deleted. The remaining accession numbers are used to pull the corresponding sequences from the databases into subdatabases enriched for good hits and the query sequence is re-run against these subdatabases to yield the final results.

The score	over	length	cutoff	for	this	search	is	
		CONTACT !	•					

Examiner Please Note: This cover sheet should be included when submitting results to be scanned.

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Schulwitz, Paul

From:

Gibbs, Terra

Sent:

Wednesday, December 01, 2004 11:00 AM

To:

Schulwitz, Paul

Subject:

Sequence search request...

Hi Paul,

I have another request for a score over length search:

I need a length limited nucleotide sequence search of SEQ ID NO:2 in USSN 09661658, where the returns are rank ordered based on the score over length/ratio as we've discussed. I need the lengths limited to hits between 8 and 100 nucleotides, and I'll take as many hits as you can import into excel (64,000?), and alignments for anything above .75 on the above ratio. Hope this is clear, please call me if it's not. I also need the interference databases searched.

Terra Cotta Gibbs, Ph.D. Art Unit 1635 Remsen Building 2D10 Mailbox 2C18 571-272-0758

12/2 10-16

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RESULT 3
AAL43090
ID AAL4
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AC AAL4
XX
DT 25-S
XX Regu
XX
Regu
XX
Gene
XX
Unid
XX
FT misc
FT misc
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Best Local Similarity
Matches 61; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention relates to regulatable, catalytically act nucleic acids (RCANAs) which are regulated by polypeptides. The useful for regulating gene expression, in assays for detecting presence of ligands, for activation of an effector of RCANA, at therapy. The present sequence is an RCANA described in the
                           misc_binding
                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 82 BP; 24 A; 21 C; 16 G; 0 T; 21 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        therapy. The present sequence is exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New regulatable, catalytically active nucleic acids (RCANA), useful in gene therapy (particularly for regulating gene expression), or in assays the presence of ligands or activation of an effector of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        misc_binding
                                                                                                                    Unidentified
                                                                                                                                         gene therapy;
                                                                                                                                                   Regulatable catalytically active nucleic acid; RCANA; ribozyme;
                                                                                                                                                                         Regulatable,
                                                                                                                                                                                                25-SEP-2002
                                                                                                                                                                                                                     AAL43090;
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                                                 stem_loop
                                                                                 misc_binding
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                                                                                                                                                                                                                                          standard; RNA; 82
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                                                                                                                                                                                                                                                                                                                                            UAAACGGGGAACCUCUCUAGUAGACAAUCCCCGUGCUAAAUUAUACCAGCAUCGUCUUGAU
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                                                                                                                                                                                                                                                                                                  GCCCUUGGCAGAUAAAUGCCUA 82
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                                                                                                                                                                        catalytically active nucleic acid #22
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29. .33
/*tag= c
/bound_moiety= "binds nucleotides 8-4 of itself"
                                                   /bound_moiety=
                                                                                              Location/Qualifiers
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Pred. No. 1.8e
21; Mismatches
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T4 theophylline-dependent intron -based RCANA

GPITH1P6.133

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RESULT 4
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Best Local S
Matches 61
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         23-SEP-2004
                                                                                                                                                                                                                                                                                                         New regulatable, catalytically active nucleic acids (RCANA), useful in gene therapy (particularly for regulating gene expression), or in assays for detecting the presence of ligands or activation of an effector of
                                                                                                                                                                                                                                                                                                                                                              Ellington AD, Hesselberth J, Davidson E, Cox JC, Reidel T;
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                                            ADQ96971
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                                            standard;
                                                                                                          GCCCTTGGCAGATAAATGCCTA 118
                                                                                                                           UAAACGGGGAACCUCUCUAGUAGACAAUCCCCGUGCUAAAUUAUACCAGCAUCGUCUUGAU
                                                                                                                                             TAAACGGGGAACCTCTCTAGTAGACAATCCCGTGCTAAATTATACCAGCATCGTCTTGAT
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k; Pred. No. 1.8e
21; Mismatches
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1.8e-05;
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15-JUN-2000; 2000US-0212097P.
14-SEP-2000; 2000US-00661658.
20-SEP-2000; 2000US-00666870.
14-JUN-2001; 2001US-00883119.
24-SEP-2001; 2001US-0324715P.
                                                                                                                                                                                                                                                                                        misc_binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RCANA; catalytically active regulatable nucleic acid; ss; ribozyme; aptamer; effector domain; nucleic acid catalyst domain; gene therapy; industrial biosynthesis; bioremediation; bacteriophage T4;
                                                                                                                                                                                                                                                misc_binding
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                                                    Ellington
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(WILS/)
                                                                                             (DAVI/)
                                                                                                           (ROBE/)
(SOOT/)
                                                                                                                               (ELLI/)
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                                 2004-560517/54.
                                                                SOOTER L.
DAVIDSON E.
COX J C.
RIEDEL T.
WILSON C.
CLOAD S T.
KEEFE A D.
                                                                                                          THOMPSON K.
ROBERTSON M
SOOTER L.
                                                                                                                                      ELLINGTON A
                                                                                                                               HESSELBERTH
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                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                synthase; self-splicing intron.
                                              Cox
                                                                                                                                                                                            2002US-00254568.
                                              Hesselberth J,
ox JC, Riedel T,
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78. .79
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Keefe AD;
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Novel regulatable, catalytically active nucleic acid comprising effector domain, and catalyst domain which comprises randomized catalytic residues and is regulated by effector that interacts with effector domain.

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RESULT 5
ADQ96997
ID ADQ9
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AC ADQ9
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Best Local (
 ADQ96997;
                                    ADQ96997 standard; RNA; 82 BP
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                                                                                                                                                                                                                                                                          61,
                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                GCCCTTGGCAGATAAATGCCTA 118
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                                                                                                                             GCCCUUGGCAGAUAAAUGCCUA 82
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                                                                                                                                                                                                                                                                                                                                               16 G; 0 T; 21 U; 0 Other;
                                                                                                                                                                                                                                                                                           Score 82; DB 1;
Pred. No. 1.8e-05;
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15-JUN-2000; 2000US-0212097F
14-SEP-2000; 2000US-00661658
20-SEP-2000; 2000US-00666870
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Novel regulatable, catalytically active nucleic acid comprising effector
                  WPI; 2004-560517/54
                                   Bllington AD, Hesselberth J,
Davidson E, Cox JC, Riedel T,
                                                                                                                                                (ELLI/)
                                                                                                                                                                                                                                   24-SEP-2002;
                                                                                                                                                                                                                                                                        US2004126882-A1
                                                                                                                                                                                                                                                                                                                                                                                  stem_loop
                                                                                                                                                                                                                                                                                                                                                                                                              misc_binding
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              misc_binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Enterobacteria phage T4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     thymidylate synthase; self-splicing intron.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aptamer; effector domain; nucleic acid catalyst domain; gene therapy; industrial blosynthesis; bloremediation; bacteriophage T4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RCANA; catalytically active regulatable nucleic acid; ss; ribozyme;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Theophylline-dependent group I intron RCANA Th1P6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-SEP-2004
                                                                                                   (DAVI/)
                                                                                                                                                                           24-SEP-2001;
                                                                                                                                                                                     L4-JUN-2001;
                                                                                            (RIED/
                                                                                                                              (ROBE/)
                                                                                                                                        (/MOHT)
                                                             SOOTER L.
DAVIDSON E.
COX J C.
RIEDEL T.
WILSON C.
CLOAD S T.
KEEFE A D.
                                                                                                                                       HESSELBERTH THOMPSON K.
                                                                                                                              ROBERTSON M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                           2001US-0324715P
                                                                                                                                                                                      2001US-00883119
                                                                                                                                                                                                                                   2002US-00254568
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/bound_moi
78. .79
                                                                                                                                                                                                                                                                                                                                                                                                               /bound_moiety= "Base 45. .46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /*tag=
                                                                                                                                                                                                                                                                                                                                                                                    /bound molety= "Bases 68-67 of the present sequence" 48...6\overline{2}
                                                                                                                                                                                                                                                                                                                                                                                                                                                  bound_moiety= "Bases 78-79 of the present sequence"
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                                                                                                                                                                                                                                                                                         bound_moiety= "Bases 35-34 of the present sequence"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               bound/
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                                                                                                                                                                                                                                                                                                                      moiety= "Base 41 of the present sequence'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               _moiety= "Bases 8-4 of the present sequence"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             moiety= "Bases 33-29 of the present sequence"
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                                                                                                                                                                                                                                                                                                                                                "Bases 46-45 of the present sequence"
                                                                                                                                                                                                                                                                                                                                                                                                                         72 of the present sequence'
                                     űχ
                                     Robertson
Cload ST,
                                       Keefe
                                     Sooter L;
fe AD;
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Ct catalytic domain), detection of a target using a RCANA (involving providing a RCANA (involving providing a RCANA conditions that coarselved modification and modifying the target using a RCANA and electing an RCANA, espable of target appears a RCANA (involving isolating and modifying the target under conditions that CC cause a RCANA-specific activity), selecting an RCANA and detecting an RCANA (involving isolating an RCANA, creating an RCANA and detecting an RCANA, creating an RCANA and detecting an RCANA (involving isolating an RCANA, creating a construct in which the CC catalytic activity of the number or regulate the expression of a reporter CC in a cell (by gene therapy) which involves inserting into a gene that CC produces the product or regulates the production of the product or regulates the production of the product or regulates the production of the product or that alters the function of the catalytic domain, CC contacting the regulatory domain with an effector thereby regulating CC production of the product. The concentration of the effector modilates CC product is fully inhibited according to the concentration of the effector modilates CC product is product; where it accesses feedback inhibitor of the catalytic of metabolic pathway. The effector or the product is endogenous or exogenous to the cell. CC metabolic pathway. The effector or the product is an intermediate in a metabolic pathway. The effector or the product is an intermediate in a metabolic pathway that is being creating drugs, and immunosuppressants. The RCANA is useful for cepllating a hological pathway in a cell, for screening apopulation of cells in a metabolic pathway and immunosuppressants. The RCANA is useful for cells for a cell that produces a bioproduct, for modilating expression of call internal pathway in a cell, for screening a population of cells industrial biosynthesis and bioremediation. The present sequence is an constraint of the spirate of the spiration of the spiration of the produce is an observable of the spiration 
                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 82 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to a regulatable, catalyticarry will acid cataly The invention relates to a regulatable, catalyticarry will acid catalytic residues of the nucleic fithm.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                splicing intron
61
                                                                         97
                                                                                                                                                                                                                                                                                                                                 61;
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                                                                                                                                                                                                                                                                                                                                                                            Similarity
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                                                                                                                                                            UAAACGGGGAACCUCUCUAGUAGACAAUCCCCGUGCUAAAUUAUACCAGCAUCGUCUUGAU
                                                                                                                                                                                                                                              TAAACGGGGAACCTCTCTAGTAGACAATCCCGTGCTAAATTATACCAGCATCGTCTTGAT
                                                                         GCCCTTGGCAGATAAATGCCTA 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24 A;
                                                                                                                                                                                                                                                                                                                                                                    62.6%;
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                                                                                                                                                                                                                                                                                                                             21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16 G; O T;
                                                                                                                                                                                                                                                                                                                                                                        Score 82;
Pred. No.
                                                                                                                                                                                                                                                                                                                                 Mismatches
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RESULT 6 ABN83053

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The sequence represents a portion of the P6 region of the Group I ribozyme joined to the anti-theophylline aptamer by a short randomised region to generate a pool of aptazymes of the presents invention. The invention relates to a novel aptazyme construct comprising a regulatable group I intron aptamer oligonucleotide sequence having an allosterically regulatable regulatory domain, where the kinetic parameters of the aptazyme on a target gene vary in response to the interaction of an allosteric effector molecule with the regulatory domain, and the intron
                                                                                                                                                                                             Ellington AD, He
                                                                                                                               Aptazyme construct for detecting the presence of ligands, comprises regulatable Group I intron aptamer oligonucleotide with a regulatory domain, and modulates their kinetic parameters in response to an
                                                                                                                                                                                                                                                                                                                                                                                          misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                        misc_binding
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                                                                                                 Example 2; Fig
                                                                                                                                                                           WPI; 2002-090203/12.
                                                                                                                                                                                                                                                     15-JUN-2000; 2000US-00661658
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Aptazyme; regulatable; aptamer; luciferase; cyclic AMP; ss; group I ribozyme; anti-theophylline; aptazyme pool.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Group I P6 aptazyme pool.
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                                                                                                                                                                                                                              (TEXA ) UNIV TEXAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                               Hesselberth J,
                                                                                                3; 42pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                       48. .62
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14. .24
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/bound_moiety=
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                                                                                                                                                                                                                                                                                                                                     bound_moiety= "Bases 35-34"
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                                                                                                English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         may be repeated 1-4 times"
                                                                                                                                                                                                          Marshall
                                                                                                                                                                                                                                                                                                                                                                      "Base may be repeated 1-4 times"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Bases 9-4"
                                                                                                                                                                                                                                                                                                                                                                                                       "Bases 46-45"
                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Bases 68-67"
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                                                                                                                                                                                                           Robertson
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Query Match
Best Local Similarity 100
Matches 76; Conservative
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 splicing reaction occurs in vitro. The aptazyme is useful: (1) in assays to detect the presence of ligands or to detect activation of an aptazyme by an effector; (2) in the identification, isolation and enhancement of allosteric effectors and of the allosterically regulatable aptazymes with which they interact; (3) to activate or repress a reporter gene (e.g. luciferase) containing an engineered intron in response to an endogenous activator; and (4) to monitor intracellular levels of proteins or small
                                                                                    The present invention relates to regulatable, catalytically active nucleic acids (RCANAs) which are regulated by polypeptides. These are useful for regulating gene expression, in assays for detecting the presence of ligands, for activation of an effector of RCANA, and in gene therapy. The present sequence is an oligonucleotide used in the construction of an RCANA
                                                                                                                                                                                                                            New regulatable, catalytically active nucleic acids (RCANA), useful in gene therapy (particularly for regulating gene expression), or in assays for detecting the presence of ligands or activation of an effector of
                                                                                                                                                                                                                                                                                                                  Ellington AD, Hesselberth J, I Davidson E, Cox JC, Reidel T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Regulatable, catalytically active nucleic acid construction oligo
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                                                        Sequence 94
                                                                                                                                                                                      Example 5; Page 68; 126pp; English.
                                                                                                                                                                                                                                                                                         WPI; 2002-122216/16.
                                                                                                                                                                                                                                                                                                                                                                                        15-JUN-2000; 2000US-0212097P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                20-DEC-2001.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Regulatable catalytically
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       molecules such as cyclic AMP
                                                                                                                                                                                                                                                                                                                                                             (TEXA ) UNIV TEXAS SYSTEM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          37 TAAACGGGGAACCTCTCTAGTAGACAATCCCGTGCTAAATTATACCAGCATCGTCTTGAT
:||||||||||||||:|:|:||:
1 UAAACGGGGAACCUCUCUAGUAGACAAUCCCGUGCUAAAUNAUACCAGCAUCGUCUUGAU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60;
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                                                         BP;
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                                                           27
                                                         A; 23 C;
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  58.0%; Sc
100.0%; P
Live 0;
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73.2%;
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  s; Pred. No. 6.1.
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Pred. No. 2.7e
20; Mismatches
                                                           17 G;
                                                                                                                                                                                                                                                                                                                                 Marshall K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  nucleic acid; RCANA;
                                                           27 T;
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                DB 1; Le
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•-
                             Length 94;
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                                                            Other;
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     Indels
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GCCTGAGTATAAGGTGACTTATACTTGTAATCTATCTAAACGGGGAACCTCTCTAGTAGA 60

Query Match Best Local S Matches 76

Similarity

58.0%;

Score 76; ; Pred. No. 0; Mismatches

DB 1; L 6.1e-05; 0

Length 94

Indels

0

Gaps

76;

Conservative

Sequence 94

BP; 27

A; 23 C; 17 G; 27 T; 0 U; 0 Other;

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RESULT 8
ADA39564
ID ADA3
XX ADA3
XX ADA3
XX ADA3
XX ADA3
XX PROPOSITION OF REGULA WAY
XX PROPOSITION OF REGULA WAY
XX 24-6
XX 24-6
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XX PROPOSITION OF REGULA WAY
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                                                                     The present invention describes a method for regulating production of a product in a cell. The method comprises inserting a regulatable cotatalytically active nucleic acid (RCANA) into a gene that produces the product or regulates the production of the product in the cell, where the coding potential and a regulatory domain that recognises an effector that alters the function of the catalytic domain, and contacting the cregulatory domain with an effector to regulate production of the product. CC Also described: (1) regulating a biological pathway in cell, or cregulating a population of cells for a cell that produces a bioproduct. CC The methods are useful for regulating a biological pathway in cell, or regulating production of a product in a cell. The RCANAs are useful as cregulating a biological pathway in cell, or cregulating production of a product in a cell. The RCANAs are useful as cregulating a biological pathway in cell, or regulating production of a product in a cell. The RCANAs are useful as cregulating a biological pathway in cell, or cregulating production of a product in a cell. The RCANAs are useful as cregulating or disfavouring production of genes in a metabolic control the expression of genes in a metabolic control the expression of genes in a metabolic control the expression of genes in a metabolic control the control the expression of a targeted bioproduct. CC The RCANAs are also useful for in vitro or in vivo sensing or detection, cand in gene therapy. The present sequence represents an oligonucleotide cused in the construction of an RCANA, which is used in an example from the construction of an RCANA, which is used in an example from the construction of an RCANA, which is used in an example from the construction of an RCANA, which is used in an example from the construction of an RCANA, which is used in an example from the construction of the construction of an RCANA, which is used in an example from the construction of the construction of an RCANA, which is used in the construction of the co
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Regulating production of a product in a cell, comprises inserting a regulatable catalytically active nucleic acid into a gene that produces the product or regulates the production of the product in the cell.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 5; Page 70; 128pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (ARCH-) ARCHEMIX CORP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RCANA construction
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The invention relates to a regulatable, catalytically active nucleic acid (RCANA) segment comprising an effector domain and a nucleic acid catalyst domain in which one or more critical catalytic residues of the nucleic acid catalytic have been randomised, where the kinetic parameters of the catalytic domain are regulated by an effector that interacts with the effector domain. Also included are a nucleic acid comprising a gene, a RCANA inserted within the gene (where the presence of an effector causes the nucleic acid to catalyse a reaction), isolating an RCANA (comprising a catalytic and an effector domain involving randomising at least one nucleotide in the catalytic domain of a catalytically active nucleic acid to create a nucleic acid gool, removing from the nucleic acid gool those nucleic acids that interact with the catalytic target of the catalytic
                                                                                                                                                                                                                                                                                                                                                              Example 5;
                                                                                                                                                                                                                                                                                                                                                                                                           Novel regulatable, catalytically active nucleic acid comprising effector domain, and catalyst domain which comprises randomized catalytic residues and is regulated by effector that interacts with effector domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-560517/54.
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14-SEP-2000; 2000US-00661658.
20-SEP-2000; 2000US-00666870.
14-JUN-2001; 2001US-00883119.
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industrial biosynthesis; k
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COX J C.
RIEDEL T.
WILSON C.
CLOAD S T.
KEEFE A D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ELLINGTON A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DAVIDSON E.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ROBERTSON M
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Keefe AD;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CC contacting the regulatory domain with an effector thereby regulating the activity of the product. The concentration of the effector modulates CC the activity of the catalytic domain of the RCANA. The production of the product is fully inhibited or is increased compared to a normal control CC level, or is partially inhibited according to the concentration of the CC effector. The RCANA blocks or activates expression of the gene. The conduct is product, where it accesses feedback inhibitor of the CC gene. The product is produced in a metabolic pathway that is being CC regulated, and the effector or the product is an intermediate in a CC metabolic pathway. The effector or the product is not product is endogenous or exogenous to the cell. CC the product is chosen from protein, enzyme, protein pharmaceutical, CC metabolite, drug, dye, vitamin, food additive, chemical additive, consent from antibiotics, anticancer drugs, and a waste product. The drug is CC lowering drugs, and immunosuppressants. The RCANA is useful for cells for a cell that produces a bioproduct, for modulating expression of coligonucleotide used to mutate the catalytic region of an RCANA based on the bacteriophage T4 thymidylate synthase gene self-splicing intron.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cause a RCANA-specific activity), selecting an RCANA and detecting an RCANA (involving isolating an RCANA, creating a construct in which the nucleic acid is in postition to regulate the expression of a reporter gene, introducing the construct into a host cell and measuring the catalytic activity of the nucleic acid upon exposure of the host cell to the effector. The RCANA is useful for regulating production of a product in a cell (by gene therapy) which involves inserting into a gene that produces the product or regulates the production of the product in the cell an RCANA which comprises a catalytic domain, that modifies a transcript to alter its coding potential, and a regulatory domain which recognises an effector that alters the function of the catalytic domain,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                those nucleic acids that interact with the carrayth modifying a catalytic domain), detection of a target using a RCANA, modifying a carget using a RCANA (involving providing a RCANA capable of target-specific modification and modifying the target under conditions that cause a RCANA-specific activity), selecting an RCANA and detecting an accountract in which the
                                                                misc_binding
                                                                                                                                                                                                                                         Regulatable,
                                                                                                                                                                                                                                                                                     25-SEP-2002
                                                                                                                                                                                                                                                                                                                                 AAL43089
                                                                                                                                                                                                                                                                                                                                                                            AAL43089 standard; RNA; 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 94
                                                                                                                              Unidentified
                                                                                                                                                                                              Regulatable catalytically active nucleic acid; RCANA; ribozyme;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              domain, adding an effector molecule to the nucleic acids and isolating those nucleic acids that interact with the catalytic target of the
                                                                                                                                                                         therapy;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCCTGAGTATAAGGTGACTTATACTTGTAATCTATCTAAACGGGGAACCTCTCTAGTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
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                                                                                                                                                                                                                                         catalytically active nucleic acid #21.
                                                                                                                                                                                                                                                                                     (first entry)
                                                                                    Location/Qualifiers
/*tag= a
/bound_moiety= "binds nucleotides 33-29 of itself"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; 23 C; 17 G; 27 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%;
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention relates to regulatable, catalytically active nucleic acids (RCANAs) which are regulated by polypeptides. These is useful for regulating gene expression, in assays for detecting the presence of ligands, for activation of an effector of RCANA, and in therapy. The present sequence is an RCANA described in the
                                                                                                                              RCANA; catalytically active regulatable nucleic acid; ss; ribozyme; aptamer; effector domain; nucleic acid catalyst domain; gene therapy; industrial biosynthesis; bioremediation; bacteriophage T4;
                                                                                                                                                                                                                                                                                                                                                                                   Sequence 45
                                                                                                                                                                                                                                                                                                                                                                                                      therapy. The present sequence is exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New regulatable, catalytically active nucleic acids (RCANA), useful in gene therapy (particularly for regulating gene expression), or in assays for detecting the presence of ligands or activation of an effector of
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misc_binding
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                                                                                     Synthetic
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                                                                                                                                                                      Theophylline-dependent group I intron RCANA B11.
                                                                                                                                                                                                                                        ADQ96996 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-122216/16.
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                                                     misc_binding
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/*tag= c
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/*tag=
29. .33
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14. .24
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29. .33
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                                                                Location/Qualifiers
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Pred. No. 0.18
9; Mismatches
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14-SEP-2000; 2000US-00661658.
20-SEP-2000; 2000US-0066870.
14-JUN-2001; 2001US-00883119.
24-SEP-2001; 2001US-032471SP.
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DAVIDSON E.
COX J C.
RIEDEL T.
WILSON C.
CLOAD S T.
KEEFE A D.
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HESSELBERTH
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      Hesselberth J,
ox JC, Riedel T,
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      Thompson
F, Wilson
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      Robertson
Cload ST,
                                                                                                                                                                                                                                                                                                                            the
                                                                                                                                                                                                                                                                                                                           present sequence"
       MP, So
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Novel regulatable, catalytically active nucleic acid comprising effector domain, and catalyst domain which comprises randomized catalytic residues and is regulated by effector that interacts with effector domain.

Example 5; SEQ ID NO 64; 78pp; English.

The invention relates to a regulatable, catalytically active nucleic acid CC (CRANA) segment comprising an effector domain and a nucleic acid catalyst compain in which one or more critical catalytic residues of the nucleic catalytic domain are regulated by an effector that interacts with the CC catalytic domain are regulated by an effector that interacts with the CC catalytic domain are regulated by an effector that interacts with the CC catalytic domain are regulated are a nucleic acid comprising a gene, a CC knaw inserted within the gene (where the presence of an effector causes the nucleic acid to catalyse a reaction), isolating an RCANA (comprising CC the nucleic acid an effector domain involving randomising at least one concleic acids that interact with the catalytic target of the catalytic domain adding an effector molecule to the nucleic acid gool those nucleic acids that interact with the catalytic target of the catalytic target using a RCANA (involving providing a RCANA, capable of the catalytic domain), detection of a target using a RCANA, and detection of a target using a RCANA, capable of target catalytic activity of the nucleic acid as in position to regulate the expression of a reporter catalytic activity of the nucleic acid modifying the target under conditions that catalytic activity of the nucleic acid use a catalytic domain, that modifies a confaction of the product or regulates the expression of a product catalytic activity of the nucleic acid upon exposure of the host cell to catalytic activity of the nucleic acid upon exposure of the host cell to confacting the regulatory domain with an effector thereby regulating confacting the regulatory domain with an effector thereby regulating the catalytic domain, which comprises a catalytic domain, that modifies a chalytic domain, which comprises a catalytic domain, that modifies a chalytic domain with an effector thereby regulating the confactivity of the catalytic domain of the RCANA. The product in the catalytic domain with a compact to a normal c

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RESULT 12
AAA98320
ID AAA98
XX AAA98
XX AAA98
XX RNA a
XX RNA a
XX RNA a
XX PSTI
DE RNA a
XX DI199
PN O2-MA
XX O2-MA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local S
Matches 31
                      This invention describes a novel test system for detecting a splice reaction comprising at least 1 optionally similar immobilized nucleic acid with at least 1 nucleic acid (I) capable of splicing, at least 1 free detection system, at least a composition containing a splice component, a suitable detection probe, and if necessary other means of help. The method is used to identify substances, which are effective as fungicides, herbicides, pesticides and/or insecticides. The method can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RNA aptamer; splice reaction; detection; fungicide; herbicide; cancer; pesticide; insecticide; diagnosis; viral disease; Grave's disease; spinal muscular atrophy; beta-thalassemia; ds.
                                                                                                                                                                                                                                                                        Disclosure; Page 10; 36pp; German.
                                                                                                                                                                                                                                                                                                                                                                 Novel test system for detecting a splice reaction used to identify substances effective as fungicides, herbicides, pesticides and
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                                                                                                                                                                                                                                                                                                                                 to diagnose a
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Matches 24
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07-OCT-1993;
22-FEB-1994;
25-APR-1994;
                                                                                                                                                                                                                                                                                                Gold L,
Polisky
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16-JAN-1996
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                                                                                                                                                                                             Identifying nucleic acid ligands increased affinity nucleic acids
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                                                                                                                                                                                                                                                                                                                                                           NEXAGEN INC.
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                                                                                                                                                          Fig 49; 251pp; English
                                                                                                                                                                                                                                                                                                Jayasena
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(first entry)
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94US-00233012.
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93US-00134028.
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                                                                                                                                                                                                                                                                                                  Tasset D, Janjic N, Kirschenheuter a S, Biesecker G, Smith D, Jenison
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from a candidate mixt.
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The sequences given in AAQ89181-88 represent nucleic acid ligands to theophylline. These ligands were identified using the method of the invention. The method comprises contacting a candidate mixture with the target molecule (i.e. theophylline) where the nucleic acids which have a increased affinity to the target relative to the candidate mixture can k partitioned from the remainder of the candidate mixture. The increased

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RESULT 14
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Best Local S
Matches 23
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Dubensky
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26-MAY-1998;
04-JAN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          candidate mixture and the isolated nucleic acids are amplified to yield a ligand-enriched mixture of nucleic acids, in which the nucleic acid ligands can be identified. The isolated ligands may be used as pharmaceuticals, diagnostic agents and in gene therapy. The ligands may be RNA or DNA molecules. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                The present sequence is that of a short RNA aptamer which is inserted into the 5' untranslated region of the Epo gene in the pVETIMEpo vector. This aptamer is designed to bind specifically and with high affinity to theophylline, a soluble, cell permeable, non toxic ligand, and will result in the translational control of Epo protein expression being specifically induced and regulated following ligand treatment and binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
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high affinity; theophylline; non toxic ligand; translational control;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Short RNA aptamer
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                                                                                                                                                                                                   Sequence 38 BP; 8 A; 11 C; 9 G; 0 T; 10 U; 0 Other;
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                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                            21A; Page 137; 170pp; English.
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AGUGAUACCAGCAUCGUCUUGAUGCCCUUGGCAG 34
                                                 AATTATACCAGCATCGTCTTGATGCCCTTGGCAG 107
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Yee J;
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                                                                                                Score 30.8; D. Pred. No. 1.4; 9; Mismatches
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Pred. No. 1
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P1 16-JAN-
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                                             This sequence respresents a nucleic acid ligand to theophylline. This construct from the conserved domains of larger theophylline ligands and a limited flanking sequence. These ligands were identified cusing the method of the invention. The method comprises contacting a candidate mixture with the target molecule (i.e. theophylline) where the nucleic acids which have an increased affinity to the target relative to the candidate mixture can be partitioned from the remainder of the candidate mixture. The increased affinity nucleic acids are partitioned from the remainder of the candidate mixture and the isolated nucleic acids are amplified to yield a ligand-enriched mixture of nucleic acids, in which the nucleic acid ligands can be identified. The isolated ligands may be used as pharmaceuticals, diagnostic agents and in gene therapy. The ligands may be RNA or DNA molecules. (Updated on 25-MAR-2003 to
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Polisky
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16-JAN-1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-SEP-1993;
07-OCT-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 26; Fig 52; 251pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Identifying nucleic acid ligands increased affinity nucleic acids
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25-APR-1994;
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3, Jayasena
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94US-00233012.
94US-00234997.
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Query Match Best Local Similarity Matches 22; Conserv

23.2%; nilarity 68.8%; Conservative

9

Mismatches

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DB 1; Length 0 Other;

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RESULT 16
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The sequences given in AAQ89117-29 represent nucleic acid ligands to theophylline. These ligands were identified using the method of the invention. The method comprises contacting a candidate mixture with the target molecule (i.e. theophylline) where the nucleic acids which have a nicreased affinity to the target relative to the candidate mixture can b partitioned from the remainder of the candidate mixture. The increased affinity nucleic acids are partitioned from the remainder of the candidate mixture and the isolated nucleic acids are amplified to yield ligand-enriched mixture of nucleic acids, in which the nucleic acid ligands can be identified. The isolated ligands may be used as pharmaceuticals, diagnostic agents and in gene therapy. The ligands may be RNA or DNA molecules. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                     08-SEP-1993;
07-OCT-1993;
22-FEB-1994;
25-APR-1994;
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14-NOV-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAQ89120 standard;
                                                                                                                                                                                             Identifying nucleic acid ligands for target molecules - by partitioning increased affinity nucleic acids from a candidate mixt. and amplifying.
                                                                                                                                                                                                                                                                                                  (NEXA-) NEXAGEN INC.
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                                                                                                                                                                                                                                                                      Pieken W,
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UGAUACCAGCAUCGUCUUGAUGCCCUUGGCAG 34
                                                                                                                                                                      Fig 48; 251pp; English.
                                                                                                                                                                                                                                                           Jayasena
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RESULT 17
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RESULT 18
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Best Local S
Matches 23
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Best Local S
Matches 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to regulatable, catalytically active nucleic acids (RCANAs) which are regulated by polypeptides. These are useful for regulating gene expression, in assays for detecting the presence of ligands, for activation of an effector of RCANA, and in gene presence of presence of ligands activation of an effector of RCANA, and in gene presence of present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the construction of the present sequence is a PCR primer used in the present sequence is a PCR primer used in the present sequence is a PCR primer used in the present sequence is a PCR primer used in the present sequence is a PCR primer used in the present sequence is a PCR primer used in the present sequence is a PCR primer used in the present sequence is a PCR primer used in the primer used in the primer used in the primer used in the present sequence is a PCR primer used in the primer used 
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                                                                                                     ADA39562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New regulatable, catalytically active nucleic acids (RCANA), useful in gene therapy (particularly for regulating gene expression), or in assays for detecting the presence of ligands or activation of an effector of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ellington AD, He Davidson E, Cox
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         an RCANA
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                                                                                                                                                                                                                                                                                                                                       19
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22; Conserv
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                                                                                                     standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP; 9 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP; 8 A;
                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
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ox JC, Reidel T;
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                                                                                                                                                                                                                                                                                                                                                                                                                              17.1%;
95.8%;
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                                                                                                     ₽₽
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Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 22.4;
Pred. No. 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    G; 0 T; 11 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ed. No. 1.5;
Mismatches
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No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1;
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                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sooter
                                                                                                                                                                                                                                                                                                                                                                                                          0
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                                                                                                                                                                                                                                                                                                                                                                                                          Сарв
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ADA39562

20-NOV-2003 (first entry)

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RESULT 19
ADQ96953
ID ADQ96
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AC ADQ96
AC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention describes a method for regulating production of a cproduct in a cell. The method comprises inserting a regulatable catalytically active nucleic acid (RCANA) into a gene that produces the product or regulates the production of the product in the cell, where the catalytic domain which modifies a transcript to alter the function of the catalytic domain that recognises an effector that alters the function of the catalytic domain, and contacting the regulatory domain with an effector to regulate production of the product. Also described: (1) regulating a biological pathway in cell; and (2) coreening a population of cells for a cell that produces a bioproduct. The methods are useful for regulating a biological pathway in cell, or regulatory elements to control the expression of genes in a metabolic pathway, or as regulated selectable markers to increase a selective pathway, or as regulated selectable markers to increase a metabolic pathway, or as regulated selectable markers to increase a selective pathway, or as regulated selectable markers to increase a selective pathway, or as regulated selectable markers to increase a selective pathway, or as regulated selectable markers to increase a selective pathway. The present sequence represents an oligonucleotide used in the construction of an RCANA, which is used in an example from the construction of an RCANA, which is used in an example from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 24
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              regulatable catalytically active nucleic acid; RCANA; catalytic domain; regulation; screening; gene therapy; biological pathway regulation; regulatory element; metabolic pathway; ribozyme; ss.
RCANA; catalytically active regulatable nucleic acid; ss; ribozyme; aptamer; effector domain; nucleic acid catalyst domain; gene therapy;
                                                                                                         RCANA GPITH1P6 PCR primer #3.
                                                                                                                                                                                                                                                                                                                    ADQ96953 standard; DNA; 24 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 5; Page 69; 128pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24-SEP-2001; 2001US-0324715P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2003027310-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ARCH-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19 TTATACTTGTAATCTATCTAAACG 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                              (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      95.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 22.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1;
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20-SEP-2000; 2000US-00666870
14-JUN-2001; 2001US-00883119
24-SEP-2001; 2001US-0324715P
                                                                                                                                                                                                     Ellington AD, Hesselberth J, Davidson E, Cox JC, Riedel T,
                                                                                                                                                                                                                                      (DAVI/)
                                                                                                                                                                                                                                                (THOM/)
(ROBE/)
(SOOT/)
                                                                                                                                                                                                                                                                                          15-JUN-2000; 2000US-0212097P
                                                                                                                                                                                                                                                                                                         24-SEP-2002; 2002US-00254568
                                                                                                                                                                                                                                                                                                                                          Enterobacteria phage T4
                                                                                                                                                                                                                                                                                                                                                   industrial biosynthesis; bioremediation; PCR; primer.
                                                                                                                                                                                                                         (CLOA/
                                                                                                                                                                                                                             (WILS/)
                                                                                                                                                                                                                                  (RIED/)
                                                                                                                                                                                                                                                                   (ELLI/)
                                                                                                                                                                                                                  ROBERTSON M I SOOTER L. DAVIDSON E. CCX J C. RIEDEL T. WILSON C. CLOAD S T. KEEFE A D.
                                                                                                                                                                                                                                                          HESSELBERTH
THOMPSON K.
                                                                                                                                                                                                                                                                   ELLINGTON A
                                                                                                                                                                                                     Thompson
[, Wilson
                                                                                                                                                                                                      אָטָ
                                                                                                                                                                                                     Robertson
Cload ST,
                                                                                                                                                                                                      MP, Sooter
Keefe AD;
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Novel regulatable, catalytically active nucleic acid comprising effector domain, and catalyst domain which comprises randomized catalytic residues regulated by effector that interacts with effector domain.

Example 5; SEQ ID NO 18; 78pp; English.

CRCANA) segment comprising an effector domain and a nucleic acid comain in which one or more critical catalytic residues of the nucleic catalyte thave been randomised, where the kinetic parameters of the Catalytic domain are regulated by an effector that interacts with the Catalytic domain are regulated by an effector that interacts with the Catalytic domain. Also included are a nucleic acid comprising a gene, a CC RCANA inserted within the gene (where the presence of an effector causes the nucleic acid to catalyte a reaction), isolating an RCANA (comprising CC a catalytic and an effector domain involving randomising at least one conclude catalytic and an effector domain of a catalytically active nucleic acid to create a nucleic acid gool, removing from the nucleic acid gool those nucleic acids that interact with the catalytic target of the catalytic domain, adding an effector molecule to the nucleic acids and isolating CC those nucleic acids that interact with the catalytic target of the catalytic domain), detection of a target using a RCANA, modifying a CC target using a RCANA, (involving isolating providing a RCANA, modifying a CC target using a RCANA, pepcific activity), selecting an RCANA, and detecting an RCANA, (involving isolating an RCANA, creating a construct in which the catalytic activity of the nucleic acid used and detecting an RCANA, introducing the construct into a host cell and measuring the catalytic acid used and measuring the construct in which the catalytic activity of the nucleic acid used production of a product in a cell (by gene therapy) which involves inserting into a gene that constructing the regulatory domain, that modifies a transcript to alter its coding potential, and a regulatory domain which constructing the catalytic domain, that modifies a transcript to alter its coding potential, and a regulatory domain which construct in the catalytic domain, that modifies a transcript of the regulating the consentration of the catalytic domain, and in the catalytic domain, and a regulating

effector. The RCANA blocks or activates expression of the effector is the product, where it accesses feedback inhibi

where it accesses feedback inhibitor

gene. ..

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RESULT 20
ADQ96938
ID ADQ96938
AC ADQ96
AC ACANA
AC
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Best Local
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                                                                  Ellington AD,
Davidson E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US2004126882-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RCANA; catalytically active regulatable nucleic acid; ss; ribozyme; aptamer; effector domain; nucleic acid catalyst domain; gene therap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RCANA GPITH1P6 PCR primer #1.
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14-SEP-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Enterobacteria phage T4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23-SEP-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          industrial biosynthesis; bioremediation; PCR; primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 24 BP; 9 A; 4 C; 2
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                                                                                                                                                                                                                                                                              RIED/
                                                                                                                                                                                                                                                                                                                 COXJ
                                                                                                                                                                                                                                                                                                                                                                                    SOOT/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (ELLI/)
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                                                                                                                                                                     SOOTER L.
DAVIDSON E.
COX J C.
RIEDEL T.
WILSON C.
CLOAD S T.
KEEFE A D.
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THOMPSON K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ELLINGTON A
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                                                                                                                                                                                                                                                                                                                                                                                                             ROBERTSON M P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTATACTAGTAATCTATCTAAACG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; 2000US-0212097P.
; 2000US-00661658.
; 2000US-00666870.
; 2001US-00883119.
; 2001US-0324715P.
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                                                                      Cox JC,
                                                                                                         Hesselberth J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   40
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95.8%;
                                                                         Riedel T,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 22.4;
Pred. No. 1
                                                                  Thompson r, Wilson
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                                                                         Robertson
Cload ST,
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                                                                                                  MP,
                                                                                                         Sooter
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Novel regulatable, catalytically active nucleic acid comprising effector domain, and catalyst domain which comprises randomized catalytic residues and is regulated by effector that interacts with effector domain.

Example 1; SEQ ID NO 3; 78pp; English

CC catalytic domain are regulated by an effector that interacts with the ceffector domain. Also included are a nucleic acid comprising a gene, a CC RCANA inserted within the gene (where the presence of an effector causes C the nucleic acid to catalyte and an effector domain are included are a nucleic acid comprising a gene, a CC RCANA inserted within the gene (where the presence of an effector causes C the nucleic acid to catalyte a reaction), isolating an RCANA (comprising CC anceletic acid by the catalytic domain involving randomising at least one nucleic acids that interact with the catalytic target of the catalytic domain, adding an effector molecule to the nucleic acid pool those nucleic acids that interact with the catalytic target of the catalytic domain, adding an effector molecule to the nucleic acid solating CC those nucleic acids that interact with the catalytic target of the specific modification and modifying the target under conditions that cause a RCANA, specific activity), selecting an RCANA and detecting an CC RCANA (involving isolating an RCANA, capable of target catalytic activity of the nucleic acid upon exposure of the host cell to C catalytic activity of the nucleic acid upon exposure of the host cell to recomprise the product or regulates the production of a product tin a cell (ly gene therapy) which involves inserting into a gene that C produces the product or regulates the function of the product in the C catalytic activity of the catalytic domain, that modifies a C transcript to alter its coding potential, and a regulatory domain which recomprises a catalytic domain, that modifies a C transcript to alter its coding potential, and a regulatory domain which recomprises and fector that alters the function of the catalytic domain, c effector is comprised to an another to a north administration of the catalytic domain. The catalytic domain with an effector to the catalytic domain of the seffector is partially inhibited according to the concentration of the effector is an intermediate in a c the product is chosen from protein, enzyme, protein pharmaceutical, metabolite, drug, dye, vitamin, food additive, chemical additive, pesticide, insecticide, feed compound, and a waste product. The drug is chosen from antibiotics, anticancer drugs, antifungals, cholesterollowering drugs, and immunosuppressants. The RCANA is useful for regulating a biological pathway in a cell, for screening a population of cells for a cell that produces a bioproduct, for modulating expression of a nucleic acid, in gene therapy applications, and for facilitating industrial biosynthesis and bioremediation. The present sequence is a PCR industrial biosynthesis and bioremediation. invention relates to a regulatable, catalyticall ANA) segment comprising an effector domain and a ain in which one or more critical catalytic resid ij the construction of an RCANA. catalytically active nucleic acid domain and a nucleic acid catalyst residues of the nucleic

Sequence 21 BP; 5 A; 2 C; 8 G; 6 T; 0 U; 0 Other;

RESULT 21
ABQ84377/c
ID ABQ843
XX
AC ABQ843 밁 Ś Matches Query Match Best Local ABQ84377 standard; DNA; 20 16; σ 1 GCCTGAGTATAAGGTG 16 Similarity Conservative 12.2%; Score 16; 100.0%; Pred. No. 2 <u>.</u> DB 1; Length 21, 39; 0, Gaps

0,

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RESULT 22
ABQ77191/c
ID ABQ77
XX
AC ABQ77
XX
AC ABQ77
XX
XX
XX
XX
XX
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                                                                                                                                                                                                                                                                                                                       The present invention describes a new isolated nucleic acid sequence (I) CC comprising a DPP10 mRNA sequence. DPP10 is a diseptidyl peptidase (also CC known as prolyloligopeptidase). (I) has antiinflammatory, antiasthmatic, CC antipsoriatic, antiarthritic and antirheumatic activities, and can be cused in vaccines and gene therapy. A composition comprising (I) can be CC used in vaccines and gene therapy. A composition comprising (I) can be CC or for preventing or treating inflammatory disease e.g., inflammatory CC bowel disease, asthma, atopy, rheumatoid arthritis or psoriasis. (I) can CC also be used in an assay for detecting or measuring DPP10 in a sample. A CC host cell comprising (I) can be used for producing recombinant DPP10 gene CC products, or in drug screening systems to identify agents for diagnosis CC or treatment of individuals having or susceptible to inflammatory CC disease. Human DPP10 is located on chromosome 2, more specifically CC chromosome 2q14. ABQ84254 to ABQ84612 and ABP55569 to ABP5629 represent CC sequences used in the exemplification of the present invention
                                                                                                                                                                                                                                Query Match
Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DPP10; dipeptidyl peptidase; prolyloligopeptidase; enzyme; asthma; antiinflammatory; antiasthmatic; antipsoriatic; antiarthritic; antirheumatic; vaccine; gene therapy; inflammatory disease; antiflammatory bowel disease; atopy; rheumatoid arthritis; psoriasis;
                                                                                                                                                                                                                                                                                               Sequence 20 BP; 4 A; 5 C; 3 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New nucleic acid sequence comprising DPP10 mRNA, useful for the manufacture of a medicament for regulating DPP10 protein expression or for preventing or treating inflammatory disease e.g., inflammatory bowel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24-APR-2001; 2001GB-00010044.
24-APR-2001; 2001GB-00010046.
12-OCT-2001; 2001GB-00024575.
12-OCT-2001; 2001GB-00024594.
                 24-APR-2003
                                                 ABQ77191;
                                                                                  ABQ77191 standard;
                                                                                                   191/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 43; Page 313; 321pp; English.
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                                                                                                                                                                  19
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                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                               CTGAGTATAAGGTGACTTA 21
                                                                                                                                                                CTGAGAATAAGGTGACCTA 1
                                                                                                                                                                                                                                  Conservative
                 (first entry)
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                                                                                  DNA; 20
                                                                                                                                                                                                                                              12.1%;
89.5%;
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                                                                                                                                                                                                                                               Pred.
                                                                                                                                                                                                                                                               Score 15.8;
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                                                                                                                                                                                                                                                 42;
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RESULT 23
AAVO1286
ID AAVO1
XX AAVO1
XX AAVO1
XX 23-MA
XX Skele
XX PCR F
XX PCR F
XX PT ST
XX ST
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (ATP) binding cassette transporter gene subfamily C12, i.e. Cystic fibrosis transmembrane conductance regulator/multidrug resistance-like subgroup (CFTR/MRP) family) polypeptide and its encoding polypucleotides The polypeptide is useful for screening agonists and antagonist of the ABCC12 polypeptide. The products of the invention are useful for screening an active ingredient for preventing and treating paroxysmal kinesigenic chorecathetosis or pathologies linked to dysfunction of transport of organic anion transported as cysteinyl leukotriene, anionic drugs, such as glutathione, glucuronate or sulphate conjugated to acidic ligands, such as glutathione, glucuronate or sulphate conjugated drugs and can be used for somatic gene therapy. This sequence represents a section of the product of the 
        Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           multidrug resistance-like subgroup; somatic gene therapy; ABCC12; paroxysmal kinesigenic choreoathetosis; cysteinyl leukotriene; anionic drug; methotrexate; neutral drug; glutathione; glucuronate;
                                                                             PCR primer; polymerase chain reaction; amplification; UM-STS; universal mammalian sequence tagged site; genomic map; clone;
                                                                                                                                                                                                   Skeletal muscle sodium channel PCR primer for universal mammalian
                                                                                                                                                                                                                                                                                                                                                             AAV01286;
                                                                                                                                                                                                                                                                                                                                                                                                                                          AAV01286 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New ATP-binding cassette transporter gene subfamily C12, ABCC12 polypeptide, useful for preventing or treating paroxysmal kinesigenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AdenoSine triphosphate (ATP)-binding cassette transporter subfamily C12; cystic fibrosis transmembrane conductance regulator; human; CFTR/MRP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human ABCC12 exon 15/intron 15 boundary (short isoform).
                                                                                                                                                                                                                                                                                    23-MAR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           human ABCC12 isoform described in the disclosure of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This invention
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Allikmets R;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        region
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(USSH ) US DEPT HEALTH & HUMAN SERVICES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17 ATTATACCAGCATCTTC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTATACCAGCATCGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP; 6 A; 2 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA;
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94.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        to an exon/intron boundary from the gene encoding
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Pred. No. 45;
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                                                                                         88
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RESULT 24
ABZ86444
ID ABZ86
XX ABZ86
XX ABZ86
XX Humar
XX Humar
XX Humar
XX Humar
XX Antis
KW ANTIS
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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                 Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present sequence represents a specifically claimed oligonucleotide PCR primer. The oligonucleotide can be used for polymerase chain reaction (PCR) amplification of DNA, specifically regions of specific genes that are conserved among mammalian species, i.e. pairs of oligonucleotides from the present specification represent universal mammalian sequence-tagged site (UM-STS) primers. The primers are used to develop genomic maps, to isolate clones from libraries, to make cross-species comparisons and to develop additional genetic markers. UM-STS allow genomic comparisons to be made between more species
                                                                                                                                                                       23-APR-2002; 2002WO-US013135
                                                                                                                                                                                                                                                                                   WO200285308-A2
                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human oligonucleotide sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABZ86444 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; Page 11; 26pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New oligonucleotide primers amplifying gene regions conserved among mammals - useful for developing genomic maps, isolating clones and
                                                                                                               24-APR-2001; 2001US-0286137P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cross-species comparisons.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1997-435083/40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Brewer GJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22-FEB-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO9731012-A1
                                                       (EPIG-) EPIGENESIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (UNMI ) UNIV MICHIGAN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-FEB-1997;
     Ĕ
                                                                                                                                                                                                                                                                                                                                                                                                   inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCATCGTCTTGATGCCCTT 102
     Ę,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Venta PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    96US-0012061P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97WO-US002403
  Sandrasagra A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       85.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 15.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. 47;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20
     Katz
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     Pabalan
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Aguilar
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   making
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junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antialtergic, antiaethmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also of or enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing or depleting levels of, or reducing bronchodilation, increasing levels of adenosine receptor, producing bronchodilation, increasing levels of brigainone or lung surfactant in a subject's tissue, or treating bronchoconstriction. The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from MIPO at fig., wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to a novel pharmaceutical composition, first active agent comprising an oligonucleotide antisense tinitiation codon, coding region, 5' or 3' end genomic flanki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its responding RNAs, and glucocorticoid or non-glucocorticoid steroid or continuous con
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Miller S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ubiquinone
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ŗ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NO 1686; 872pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Shahabuddin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 which has
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밁 S Query Match Best Local S Matches 17 19 Similarity TTATACTTGTAATCTATCTA 38 TTATATCTGTAATCTATCCA Conservative 85.0%; 11.6%; 0; Score 15.2; Pred. No. 4 Mismatches DB 1; Length 20; **ω** Indels 0 Gaps 0

Sequence 20

BP; 6 A; 4 C; 1 G; 9 T; 0 U; 0 Other;

ABD22674; ABD22674 standard; DNA; 20 ВÞ

Human myosin X-derived oligonucleotide

SEQ ID 1686

29-JUL-2004

(first entry)

RESULT 25
ABD22674
ID ABD22
XX ABD22
XX ABD22
XX ABD22
XX ABD22
XX Human
XX Human
XX Humar
KW Humar
KW emph
KW emph
KW resp:
KW resp:
KW resp:
XW wollm
XX Pullm
XX Jan
AX ABD22
AX ABD22
AX ABD22
ABD24
AX ABD22
ABD25
ABD26
ABD26 Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer.

sapiens.

WO200285309-A2

23-APR-2002; 2002WO-US013143.

24-APR-2001; 2001US-0286036P

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RESULT 26
ABN83051/c
ID ABN830
XX
AC ABN830
AC ABN830
AC ABN830
C
T 16-AUG
C
XX
G
DT 16-AUG
C
XX
G
DE GpITh1
XX
C
XX
Aptazy
XX
C
XX
Uniden
XX
FT misc_b
FT misc_b
                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                   Composition comprises oligo and is administered to reduce the production or cancer and can be anti-sense to the corresponding mRNA.

Combined invention also describes a kit, that comprises: (a) a delivery composition of the invention also describes a kit, that comprises: (b) a delivery composition for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenargic agonist. The composition is useful for preventing or composition comprises oligo and is administered to reduce the production composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The composition allergies and/or bronchoconstriction and/or lung ulmonary obstruction, allergies and/or bronchoconstriction and/or lung complementation, allergies, asthma, impeded respiration, respiratory hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary composition rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to the oligonucleotides into products that free adenosine into the system content and effect, kidney, etc.
                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                              Query Match
Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nyce JW,
Miller S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptor surfactant depletion or hyposecretion, when administered to a mammal oligonucleotides are derived from a gene encoding or regulating
                                                                  Unidentified
                                                                                                                  GpITh1P6.131 aptamer construct
                                                                                                                                            16-AUG-2002
                                                                                                                                                                      ABN83051
                                                                                                                                                                                              ABN83051 standard;
                                                                                                                                                                                                                                                                                                                                                                Sequence 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This invention describes a novel composition
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 15; SEQ ID NO 1686; 763pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         nucleic acids associated with lung airway or lung dysfunction, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-093058/08.
                           misc_binding
                                                                                                                                                                                                                                                                                                                                                                                           prevent any unwanted effects due to it
                                                                                         Aptazyme; regulatable; aptamer; luciferase; cyclic AMP; ss; GpITh1P6.131.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             comprising oligonucleotides,
                                                                                                                                                                                                                                                                                      19
                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                      TTATACTTGTAATCTATCTA 38
                                                                                                                                                                                                                                                              TTATATCTGTAATCTATCCA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Li Y,
Tang
                                                                                                                                                                                                                                                                                                                                                                 BP; 6 A; 4 C; 1 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                            (first entry)
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                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sandrasagra A,
L, Shahabuddin
/*tag=  a
/bound_moiety= "Bases 33-28"
                                                                                                                                                                                              RNA;
                                                                                                                                                                                                                                                                                                                            11.6%;
                                                                                                                                                                                              82
                                                                                                                                                                                              ВP
                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                            Score 15.2;
Pred. No. 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ovel composition (a) a first active effective for alleviating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Katz E,
                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                              47;
                                                                                                                                                                                                                                                                                                                                        DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pabalan
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 'n
                                                                                                                                                                                                                                                                                                               Indels
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                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         receptors, mammal. The
                                                                                                                                                                                                                                                                                                               Gaps
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                                                                                                                                                                                                                                                                                                               0
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Query Match
Best Local S
Matches 22
                                                                                                                                                                                     invention. The invention relates to a novel aptazyme construct comprising a regulatable group I intron aptamer oligonucleotide sequence having an allosterically regulatable regulatory domain, where the kinetic parameters of the aptazyme on a target gene vary in response to the interaction of an allosteric effector molecule with the regulatory domain, and the intron splicing reaction occurs in vitro. The aptazyme is useful: (1) in assays to detect the presence of ligands or to detect activation of an aptazyme by an effector; (2) in the identification, isolation and enhancement of allosteric effectors and of the allosterically regulatable aptazymes with which they interact; (3) to activate or repress a reporter gene (e.g. luciferase) containing an engineered intron in response to an endogenous activator; and (4) to monitor intracellular levels of proteins or small molecules such as cyclic AMP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ellington AD, ne.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         misc_binding
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                                                                                                                                                    Sequence 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Fig 2A; 42pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Aptazyme construct for detecting the presence of ligands, comprises regulatable Group I intron aptamer oligonucleotide with a regulatory and modulates their kinetic parameters in response to an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_binding
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2002-090203/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15-JUN-2000; 2000US-00661658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-JUN-2001; 2001WO-US019119.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200196541-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         stem_loop
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The sequence represents the GpITh1P6.131 aptamer construct used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (TEXA ) UNIV TEXAS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-DEC-2001
                                                                                           Similarity
AGACGATGCTGGTATAATTTAGCACGGGATTGTCT
                                AGACAATCCCGTGCTAAATTATACCAGCATCGTCT
                                                                                                                                                    B₽;
                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hesselberth J, ox JC, Reidel T;
                                                                                                                                                    24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /*tag=
28. .33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /bound_moiety= "Bases 68-67"
48. .62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /*tag= g
/bound_moiety=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /*tag=
67. .68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /bound
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /bound
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           bound_moiety= "Bases 35-34"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               bound_moiety=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               *tag=
                                                                                                                                                  A; 21 C;
                                                                                           10.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          moiety=
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                                                                                                                                                    16 G; O T;
                                                                         Score 14.2; DI
Pred. No. 29;
0; Mismatches
                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Marshall K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Base 72"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Bases 9-4"
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RESULT 27
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                                                                                                                                         New regulatable, catalytically active nucleic acids (RCANA), useful in gene therapy (particularly for regulating gene expression), or in assays for detecting the presence of ligands or activation of an effector of
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                                                                                        Example 1;
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                                                                                      Fig 2A; 126pp; English
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78. .79
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The present invention relates to regulatable, catalytically active nucleic acids (RCANAs) which are regulated by polypeptides. These at useful for regulating gene expression, in assays for detecting the presence of ligands, for activation of an effector of RCANA, and in

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RESULT 28
AAL43090/c
ID AAL43090/c
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AC AAL430
AC Regula
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OX Unider
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Davidson E,
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                                                                 UNIV TEXAS SYSTEM.
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14-SEP-2000; 2000US-006661658.
20-SEP-2000; 2000US-00666870.
14-JUN-2001; 2001US-00883119.
24-SEP-2001; 2001US-0324715P.
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Novel regulatable, catalytically active nucleic acid comprising effector domain, and catalyst domain which comprises randomized catalytic residues and is regulated by effector that interacts with effector domain.

Example 1; SEQ ID NO 38; 78pp; English.

The invention relates to a regulatable, catalytically active nucleic acid (RCANA) segment comprising an effector domain and a nucleic acid catalyst compain in which one or more critical catalytic residues of the nucleic catalytic domain are regulated by an effector that interacts with the catalytic domain. Also included are a nucleic acid comprising a gene, a complete acid to catalyse are detector. It is a nucleic acid comprising a gene, a catalytic acid to catalyte and an effector domain involving randomising at least one complete acid to create a nucleic acid pool, removing randomising at least one concleic acids that interact with the catalytic target of the catalytic domain of a catalytic target of the catalytic domain, adding an effector molecule to the nucleic acid pool those nucleic acids that interact with the catalytic target of the catalytic domain, adding an effector molecule to the nucleic acid shall include a removing from the nucleic acid pool those catalytic domain, adding an effector molecule to the nucleic acids and isolating catalytic complete acids that interact with the catalytic target of the specific modification and modifying the target using a RCANA, modifying a catalytic domain, detecting an account of a target of the specific modification and modifying the target under conditions that cause a RCANA-specific activity, selecting a RCANA and detecting an account of interactivity, of the nucleic acid upon exposure of the host cell to the effector. The RCANA is useful for regulating production of a product in the catalytic domain, which comprises a catalytic odmain, that modifies a transcript to alter its coding potential, and a regulatory domain which control is fully inhibited or is increased compared to a normal control the effector. The RCANA blocks or activates expression of the gene. The effector. The RCANA blocks or activates expression of the segme. The effector. The RCANA blocks or activates expression of the gene. The effector is the product, where it accesses feedback inhibitor of the gene. The product is produced in a metabolic pathway that is being regulated, and the effector or the product is an intermediate in a

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RESULT 30
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15-JUN-2000; 2000US-0212097P.
14-SEP-2000; 2000US-006661658.
20-SEP-2000; 2000US-00666870.
14-JUN-2001; 2001US-00883119.
24-SEP-2001; 2001US-0324715P.
                                                                                                                                                                                                                                                                                                                 US2004126882-A1
                                                                                                                                                                                                           Ellington
                                                                                                                                                                                                                                         (SOOT/)
                                                                                                                                                                                                                                                      (ELLI/)
(HESS/)
(THOM/)
                                                                                                                                                                                                                                                                                                24-SEP-2002; 2002US-00254568
                                                                                                                                                                                                                            WILS/)
                                                                                                                                                                                                                                 RIED/)
                                                                                                                                                                                                                                     COXJ/
                                                                                                                                                                                               2004-560517/54.
                                                                                                                                                                                                                  SOOTER L.
DAVIDSON E.
COX J C.
RIBDEL T.
WILSON C.
CLOAD S T.
KEEFE A D.
                                                                                                                                                                                                                                                          ELLINGTON A
HESSELBERTH
                                                                                                                                                                                                                                                  ROBERTSON M
                                                                                                                                                                                                                                                      THOMPSON
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                                                                                                                                                                                                           ΑD,
                                                                                                                                                                                                      Cox JC,
                                                                                                                                                                                                      Hesselberth J, Tox JC, Riedel T,
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                                                                                                                                                                                                                                                          9.0
                                                                                                                                                                                                      Thompson
F, Wilson
                                                                                                                                                                                                      O'K
                                                                                                                                                                                                       Robertson MP,
Cload ST, Ke
                                                                                                                                                                                                       Keefe
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Novel regulatable, catalytically active nucleic acid comprising effector domain, and catalyst domain which comprises randomized catalytic residues and is regulated by effector that interacts with effector domain.

Sooter L; 8

Example 5; SEQ ID NO 65; 78pp; English.

CC catalytic domain are regulated by an effector that interacts with the Ceffector domain. Also included are a nucleic acid comprising a gene, a CC RCANA inserted within the gene (where the presence of an effector causes CC the nucleic acid to catalyse a reaction), isolating an RCANA (comprising a catalytic and an effector domain involving randomising at least one concluded in the catalytic domain involving randomising at least one concluded a cide that interact with the catalytic transpet of the catalytic commain adding an effector molecule to the nucleic acid pool those nucleic acids that interact with the catalytic target of the catalytic domain, adding an effector molecule to the nucleic acid and isolating CC those nucleic acids that interact with the catalytic target of the catalytic domain), detection of a target using a RCANA modifying a conclusion of a target using a RCANA, supported to a RCANA, involving providing a RCANA capable of target cause a RCANA-specific activity), selecting an RCANA and detecting an RCANA, introducing the construct into a host cell and measuring the catalytic activity of the nucleic acid upon exposure of the host cell to CC catalytic activity of the nucleic acid upon exposure of the host cell to CC catalytic activity of the nucleic acid upon exposure of the product in the CC catalytic domain, which comprises a catalytic domain, that modifies a product or regulator the function of the product in the CC contacting the regulatory domain with an effector thereby regulating production of the product to the the RCANA. The production of the product of the catalytic domain, that modifies a contacting the partially inhibited according to the concentration of the catalytic domain of the RCANA. The production of the effector. The RCANA blocks or activities expression of the gene. The cc effector is the product, where it accesses feedback inhibitor of the ceffector is the product is an intermediate in a metabolic pathway that is being contacting the effector is endogenous or exogenous to The invention relates to a regulatable, catalytically active nucleic ac (RCANA) segment comprising an effector domain and a nucleic acid cataly domain in which one or more critical catalytic residues of the nucleic acid catalyst have been randomised, where the kinetic parameters of the catalytically active nucleic acid of the

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Best Local S
Matches 22
The present invention describes a method for determining the methylation status of CpG dinucleotides within the genes for oestrogen receptor, p21, p27, p16, progesterone receptor, myoglobin, pcna, cdc2, cerB2, p33 and/or CEA, which comprises contacting the target nucleic acid with a reagent that distinguishes between methylated and non-methylated CpG dinucleotides, and determining from the methylation status of the CpG positions the presence of a colon cancer. A set of oligomers or peptide nucleic acid (PNA)-oligomers can be used as probes for determining the cytosine methylation state and/or single nucleotide polymorphisms (SNP) of a corresponding genomic DNA by analysis of a chemically pretreated genomic DNA. The pretreated genomic DNA is useful for the determination
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        the product is chosen from protein, enzyme, protein pharmaceutical, metabolite, drug, dye, vitamin, food additive, chemical additive, pesticide, insecticide, feed compound, and a waste product. The drug is chosen from antibotics, anticancer drugs, antifungals, cholesterollowering drugs, and immunosuppressants. The RCANA is useful for regulating a biological pathway in a cell, for screening a population of rells for a cell that produces a bioproduct, for modulating expression of a nucleic acid, in gene therapy applications, and for facilitating industrial biosynthesis and bioremediation. The present sequence is an RCANA based on the bacteriophage T4 thymidylate synthase gene self-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Determining methylation status of CpG dinucleotides using modified genomic sequences, oligonucleotides and/or PNA-oligomers, useful in the characterization, grading, staging and/or diagnosis of colon cancer.
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characterisation; classification; diagnosis; differentiation;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2003-256600/25.
                                                                                                                                                                                                                                                                                                                                                                                                                                 26; Page 177; 219pp; English.
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62.9%;
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Pred. No. 29
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                                                   The present invention describes a method for determining the methylation estatus of CpG dinucleotides within the genes for oestrogen receptor, p21, CC p27, p16, progesterone receptor, myglobin, pcna, cdc2, c-erB2, p53 cC and/or CEA, which comprises contacting the target nucleic acid with a reagent that distinguishes between methylated and non-methylated CpG dinucleotides, and determining from the methylation status of the CpG positions the presence of a colon cancer. A set of oligomers or peptide nucleic acid (PNA)-oligomers can be used as probes for determining the cytosine methylation state and/or single nucleotide polymorphisms (SNP) cf a corresponding genomic DNA by analysis of a chemically pretreated genomic DNA. The pretreated genomic DNA is useful for the determination of the methylation status of a corresponding genomic DNA and/or detection of SNPs. The methods and pretreated genomic DNA are also useful for the characterisation, classification, diagnosis and differentiation of colon cell proliferative disorders. ACF62752 to ACF63278 represent sequences used in the exemplification of the present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      petermining methylation status of CpG dinucleotides using modified genomic sequences, oligonucleotides and/or PNA-oligomers, useful in characterization, grading, staging and/or diagnosis of colon cancer
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 26;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         09-AUG-2001; 2001DE-01039283.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Taubert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               English.
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Pred. No. 64;
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Sequence 18

BP; 5 A; 7 C; 1 G;

5 T; 0 U; 0 Other;

BB 1;

Length

18

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RESULT 33
ADB54669/c
ID ADB5466
XX ADB5466
XX ADB5466
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XX COLOR
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                                                                                                     Query Match
Best Local S
Matches 15
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Best Local 9
                                                                                                                                                                                                                                                                                                          The invention relates to a novel method for detecting and differentiating between colon cell proliferative disorders associated with at least one gene or its regulatory regions. The method comprises contacting a target nucleic acid in a biological sample obtained from the subject with at least one reagent or a series of reagents, where the reagent or series of reagents, distinguishes between methylated and non methylated CpG dinucleotides within the target nucleic acid. The molecules of the invention demonstrate cytostatic activity whilst the method may useful for detecting and differentiating between colon cell proliferative disorders, including cancers such as colon adenoma and colon carcinoma. The PNA (peptide nucleic acid) -01igomers are useful as probes for determining cytosine methylation state or single nucleotide polymorphisms. The current sequence is that of the hybridisation
                                                                                                                                                                                                             Sequence 18
                                                                                                                                                                                                                                                                                       polymorphisms. To oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Detecting and differentiating between colon cell proliferative disorders associated with a gene or its regulatory regions comprises contacting a target nucleic acid in a biological sample obtained from the subject with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    colon cell
cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 36; Page 38; 74pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-731620/69
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27-FEB-2003; 2003WO-EP002035
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-DEC-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Adorjan
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18
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                                                                                                                                Similarity
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                                                 CAATCCCGTGCTAAATT 77
CAATCCCTCGCTAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAATCCCTCGCTAAATT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            , Burger M,
Schmitt A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 proliferative disorder; non methylated CpG dinucleotide;
; cancer; adenoma; carcinoma; cytosine methylation state; ss;
                                                                                                                                                                                                             BP; 5
                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
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                                                                                                                                                                                                                                                                                       of the invention which was used to analyse the genomic
                                                                                                                                                                                                             A; 1 C; 7
                                                                                                                           10.5%;
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Pred. No. 64;
0; Mismatches
                                                                                                                                                                                                          G; 5 T; 0 U; 0 Other;
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                                                                                                                                                         Score
                                                                                                                                   Pred
                                                                                                        Mismatches
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                                                                                                                                   ŏ.
                                                                                                                                                         13.8;
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                                                                                                                                                            DB 1;
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                                                                                                     Gaps
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RESULT 34
AAL43048/c
ID AAL430
XX AAL430
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XX ROLL
XX Synthe
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XX UTEXA
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Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention relates to regulatable, catalytically act nucleic acids (RCANAs) which are regulated by polypeptides. The useful for regulating gene expression, in assays for detecting presence of ligands, for activation of an effector of RCANA, an therapy. The present sequence is an oligonucleotide used in the construction of an RCANA
                                                                  regulatable catalytically active nucleic acid; RCANA; catalytic dom regulation; screening; gene therapy; biological pathway regulation; regulatory element; metabolic pathway; ribozyme; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New regulatable, catalytically active nucleic acids (RCANA), useful in gene therapy (particularly for regulating gene expression), or in assays for detecting the presence of ligands or activation of an effector of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 94 BP; 27
                                                                                                                                                                  RCANA construction
                                                                                                                                                                                                                 20-NOV-2003
                                                                                                                                                                                                                                                                ADA39564;
                                                                                                                                                                                                                                                                                                            ADA39564 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15-JUN-2000; 2000US-0212097P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Regulatable catalytically active nucleic acid; RCANA; ribozyme;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Regulatable,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-SEP-2002
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                                                                                                                                                                                                                 (first entry)
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ox JC, Reidel T;
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80.0%;
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Pred. No. 30;
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RESULT 36
ADQ96955/c
ID ADQ96
XX ADQ96
XX ADQ96
XX ADQ96
XX Z3-SE
XX RCANA
XX RCANA
XX RCANA
XX RCANA
XX Indus
XX thymi
XX Synth
XX Synth
XX US200
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XX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        product in a cell. The method comprises inserting a regulatable catalytically active nucleic acid (RCANA) into a gene that produces the product or regulates the production of the product in the cell, where the RCANA comprises a catalytic domain which modifies a transcript to alter the coding potential and a regulatory domain that recognises an effector that alters the function of the catalytic domain, and contacting the regulatory domain with an effector to regulate production of the product. Also described: (1) regulating a biological pathway in cell, and (2) as creening a population of cells for a cell that produces a bioproduct. The methods are useful for regulating a biological pathway in cell, or regulating production of a product in a cell. The RCANAs are useful as regulatory elements to control the expression of genes in a metabolic pathway, or as regulated selectable markers to increase a selective the RCANAs are also useful for in vitro or in vivo sensing or detection, and in gene therapy. The present sequence represents an oligonuclectide used in the construction of an RCANA, which is used in an example from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S
Matches 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Regulating production of a product in a cell, comprises inserting a regulatable catalytically active nucleic acid into a gene that product the product or regulates the production of the product in the cell.
                                                                                                                                                RCANA; catalytically active regulatable nucleic acid; 88; ribozyme; aptamer; effector domain; nucleic acid catalyst domain; gene therap industrial biosynthesis; bioremediation; bacteriophage T4;
                                                                                                                                                                                                                  RCANA GPITH1P6 mutagenic oligonucleotide
                                                                                                                                                                                                                                                                                                                     ADQ96955 standard; DNA; 94 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 94 BP;
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                 01-JUL-2004
                                                                                                 Enterobacteria
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                                                  US2004126882-A1
                                                                                                                                  thymidylate synthase; self-splicing
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             present invention describes a method for regulating production of
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         invention.
                                                                                                                                                                                                                                                   (first entry)
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Pred. No. 30;
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Ellington AD, Hear
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(SOOT/)
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20-SEP-2000; 2000US-0066870.
14-JUN-2001; 2001US-00883119.
24-SEP-2001; 2001US-0324715P.
                                                                                                                                                                                                                                                                                                   15-JUN-2000; 2000US-0212097P
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                                                                                                                                                                                                            2004-560517/54.
                                                                                                                                                                                                                               DAVIDSON E.
COX J C.
RIEDEL T.
WILSON C.
CLOAD S T.
KEEFE A D.
                                                                                                                                                                                                                                                                      ELLINGTON A
HESSELBERTH
                                                                                                                                                                                                                                                          SOOTER
                                                                                                                                                                                                                                                              ROBERTSON M
                                                                                                                                                                                                                                                                   THOMPSON
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ox JC, Riedel T,
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                                                                                                                                                                                                                    Robertson MP,
Cload ST, Ke
                                                                                                                                                                                                                     Keefe
                                                                                                                                                                                                                         Sooter L;
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B;
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Novel regulatable, catalytically active nucleic acid comprising effector domain, and catalyst domain which comprises randomized catalytic residue and is regulated by effector that interacts with effector domain.

Example 5; SEQ ID NO 20; 78pp; English.

The invention relates to a regulatable, catalytically active nucleic acid (RCANA) segment comprising an effector domain and a nucleic acid catalyst commain in which one or more critical catalytic residues of the nucleic catalytic domain are regulated by an effector that interacts with the effector domain. Also included are a nucleic acid comprising a gene, a RCANA inserted within the gene (where the kinetic parameters of the catalytic and an effector domain involving randomising at least one nucleic acid to catalyte a reaction), isolating an RCANA (comprising catid to create a nucleic acid comprising a gene, a catalytic and an effector domain involving randomising at least one nucleic acids that interact with the catalytically active nucleic acid comain, adding an effector molecule to the nucleic acids and isolating catalytic domain, adding an effector molecule to the nucleic acids and isolating catalytic domain), detection of a target uning a RCANA, modifying a respectific modification and modifying the target under conditions that cause a RCANA, specific activity, selecting an RCANA and detecting an regulating providing a RCANA, modifying a catalytic acid with the catalytic target of the catalytic acid with the catalytic under conditions that cause a RCANA, specific activity, selecting an RCANA, modifying a catalytic acid with the catalytic and measuring the catalytic acid upon exposure of the host catalytic acid is in posticion to regulate the expression of a reporter gene, introducing the construct into a host cell and measuring the catalytic acid upon exposure of the host cell to the effector. The RCANA is useful for regulating production of a product to a cell (by gene therapy) which involves inserting into a gene that recognises an effector that alters the function of the redatlytic domain, that modifies a catalytic domain with an effector the product in the catalytic domain, that modifies a catalytic domain with an effector the catalytic domain of the RCANA, The product on of the sense the product is pr the product is chosen from protein, enzyme, protein pharmaceutical, metabolite, drug, dye, vitamin, food additive, chemical additive, pesticide, insecticide, feed compound, and a waste product. The drug

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RESULT 37
ABN83053/c
ID ADN830
XX ADN830
XX ADN830
XX ADN830
XX ADN830
XX Group
XX Aptazy
XX Group
XX Group
XX Unider
FT misc_!
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Best Local S
Matches 16
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              15-JUN-2000; 2000US-00661658
                                     15-JUN-2001; 2001WO-US019119
                                                                                         WO200196541-A2
                                                                                                                                         misc_binding
                                                                                                                                                                               misc_feature
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Aptazyme; regulatable; aptamer; luciferase; cyclic AMP; ss; group I ribozyme; anti-theophylline; aptazyme pool.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Group I P6 aptazyme
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 94 BP;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABN83053;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABN83053 standard; RNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25
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34..35
/*tag= c
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15. .46
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                                                                                                              bound_moiety= "Bases 35-34"
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Pred. No. 30;
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                                                                                                                                                      "Base
                                                                                                                                                                                                                                                           "Bases
                                                                                                                                                                                                                                                                                                                                                                           "Bases
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                                                                                                                                                                                                                                                                                               be repeated 1-4 times"
                                                                                                                                                     may be repeated 1-4 times"
                                                                                                                                                                                            46-45"
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RESULT 38
AAS56827
ID AAS56
AC AAS56
AC AAS56
AC AAS56
AC Valid
XX Humar
KW Cytos
KW inhik
KW BR3;
XX
OS Homo
XX
WO200
PN WO200
PN WO201
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PF 23-MJ
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PF 23-MJ
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PF 23-MJ
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PF 13-MJ
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Best Local S
Matches 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           region to generate a pool of aptazymes of the presents invention. The group I intron aptamer oligonucleotide sequence having an allosterically regulatable regulatory domain, where the kinetic parameters of the aptazyme on a target gene vary in response to the interaction of an allosteric effector molecule with the regulatory domain, and the intron splicing reaction occurs in vitro. The aptazyme is useful: (1) in assays to detect the presence of ligands or to detect activation of an aptazyme by an effector; (2) in the identification, isolation and enhancement of allosteric effectors and of the allosterically regulatable aptazymes with which they interact; (3) to activate or represens a reporter gene (e.g. luciferase) containing an engineered intron in response to an endogenous activator; and (4) to monitor intracellular levels of proteins or small molecules such as cyclic AMP
                               Beger C,
                                                                                                                                                                                                                                                                       Human; BRCA-1 regulator; ribozyme; BR1; RNA target recognition; probe; cytostatic; RNA cleavage; tumour suppressor; PCR primer; CHLR2; AP6; BI inhibitor dominant negative 4; breast basic conserved protein 1; BBC1; BR3; ID4; cancer; proliferative disorder; tumour proliferation; ss.
                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                         Validation ribozyme DNA sequence #1.
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                                                                                                            23-MAR-2000; 2000US-00536058
                                                                                                                                            23-MAR-2001; 2001WO-US009559.
                                                                                                                                                                                                            WO200170982-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The sequence represents a portion of the P6 region of the Group I ribozyme joined to the anti-theophylline aptamer by a short randomised
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 2; Fig 3; 42pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Aptazyme construct for detecting the presence of ligands, comprises regulatable Group I intron aptamer oligonuclectide with a regulatory
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                                                               (BEGE/)
                                                                                (-DMMI-)
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                                                              IMMUSOL INC
BEGER C.
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                               Barber J,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA;
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                               Wong-Staal F;
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Pred. No. 34;
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RESULT 39
ABT356
XX ABT356
XX ABT356
XX ABT356
XX Cytost
KW Cytost
KW Antise
KW Antise
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Matches 14
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 The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that
                                                                                                                       New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                     WO2003025175-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-JUN-2003
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                                                                                     Disclosure; Page 187;
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                                                                                                                                                                                                                                                                                               17-SEP-2001; 2001FR-00011978.
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87.5%;
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RESULT 40
ACC80518/c
ID ACC805
XX ACC805
XX ACC805
XX ACC805
XX MOUSE;
XW MOUSE;
XW MOUSE;
XW MO2003
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Matches 14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMSA probe for protein binding to mouse UCP1 enhancer region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
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87.5%;
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Kozak LP, (LOUU) UNIV LOUISIANA STATE & AGRIC & MECH COLL. 24-SEP-2001; 2001US-0324400P. 24-SEP-2002; 2002WO-US030266. Rim JS;

Ameliorating or preventing in mammals, symptoms of a disease treatable by increasing uncoupling protein 1 (Ucpl) expression, by administering a compound that causes an increase in concentration of NFE212 protein, to to a

2003-354624/33

Example 2; Page 17; 57pp; English.

The invention relates to the treatment of e.g a weight disorder such as obesity, by increasing thermogenesis in brown adipose tissue (BAT). The method involves increasing the expression of the BAT gene, mitochondrial uncoupling protein 1 (UCPI), especially by contacting the regulatory region of the gene with the nuclear factor erythroid 2 (NF-E2) transcription factor. This sequence represents an electrophoretic

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RESULT 41
ADB41555/c
ID ADB4155
XX ADB415
XX Oytost
KW Cytost
KW Primer
KW Virus
KW Virus
KW Virus
KW Virus
KW OYOST
XX PO 10-MAY
XX IN-SEP
XX IN-
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suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours
                                                                                                                                                                                                         The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              useful e.g.
polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schi
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04-DEC-2003
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Pred. No. 80;
0; Mismatches
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RESULT 42
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Query Match
Best Local S
Matches 14
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Best Local S
Matches 14
                                                                                                                                                 The invention relates to novel mutant forms of the rice acetolactate synthase (ALS) gene encoding ALS resistant to pyrimidinyl carboxy herbicides. Plants which may be transformed with the mutant gene incl rice, and also maize, barley, wheat, soya, cotton and tobacco. The mu gene may be useful in the production of herbicide-resistant plants wheat he cultivated in the presence of the herbicide. The present seque is used in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        or cell degeneration (e.g. Alzheimer's disease or schizophrenia). Analysis of the expression of the nucleotides can be used for diagnos and/or prognosis of these diseases. The nucleotides and polypoptides also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal
                                                                                                                                                                                                                                                                                                                                                                                                                Genes of rice origin encoding pyrimidinyl carboxy herbicide acetolactate synthase for production of herbicide resistant rice and other plants.
                                                                                                   Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (TSUB )
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                                                                                                                                                                                                                                                                                                                                                               Example 4; SEQ ID NO 21; 96pp; Japanese
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ss; rice; acetolactate synthase; ALS; pyrimidinyl carboxy herbicide;
herbicide-resistance; herbicide.
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                        Local Similarity
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NAT INST AGROBIOLOGICAL SCI.
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                                                                                                      BP; 2 A; 4 C; 5 G; 6 T; 0 U; A Other;
  Conservative
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                     9.8%;
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                          Score 12.8;
Pred. No. 8
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Pred. No. 8
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                                                     17;
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e strains or
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RESULT 43
AD149919
ID AD149
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XX CYCOR
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RESULT 44
ACC53993/c
ID ACC539
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AC ACC539
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AC ACC539
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AC ACC539
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Best Local S
Matches 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  in the phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses. The invention may be useful for the development of compounds with a cytostatic, virucide, neuroprotective, nootropic or neuroleptic activity. The DNA sequences may be useful as probes and primers for detecting, indentifying, quantifying and/or amplifying nucleic acid, for example as one component of a gene chip, in vitro as antisense reagents and for production of recombinant polypeptides. The invention may therefore be useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia. The present sequence is that of a nucleic acid sequence of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                      27-JUN-2003
                                                                                                ACC53993;
                                                                                                                                                           ACC53993 standard,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; SEQ ID NO 2422; 30pp; French
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tumour suppression; tumour reversion; apoptosis; virus resistance; cytostatic; virucide; neuroprotective; noctropic; neuroleptic; probe; primer; PCR; gene chip; antisense; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; ds; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human tumour suppression/reversion-related DNA sequence SeqID2422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            at ftp.wipo.int/pub/publishedpct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-SEP-2001; 2001FR-00011980
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   invention relates to novel isolated nucleic acid sequences involved
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                                                                                                                                                           DNA; 17
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87.5%;
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RESULT 45
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KW HCV I
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Matches 14
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                                                                                                                                                                                                                                                                                                                              Hepatitis C virus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADI84100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADI84100 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This sequence represents an isolated nucleic acid sequence associated with tumour suppression or regression, apoptosis or virus resistance invention relates to these sequences or sequences having at least 80% identity to them, and polypeptides encoded by the sequences or polypeptides having 80% identity to the polypeptide sequences. The polypeptides having 80% identity to the polypeptide sequences. The polypeptide sequences or disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New nucleic acid sequences associated with tumor suppression, apoptosis or virus resistance are useful to diagnose and treat disease, development of tumor cells and cell degeneration.
                                                                                                                                                               18-DEC-2000; 2000US-00740332.
                                                                                                                                                                                                                      03-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 characterized by development of tumour cells or cellular degeneration
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                              (BLAT/)
                                                                                                            18-DEC-2000; 2000US-00740332
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (MOLE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20-JUN-2001; 2001FR-00008139.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human tumour suppressor sequence #2760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                             enzymatic nucleic infection; type I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17
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  ) BLATT L.
) MCSWIGGEN J.
) ROBERTS E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULAR ENGINES LAB SA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GATGCCCTTGGCAGAT 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GATGGTCTTGGCAGAT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP; 5 A; 6 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9.8%;
                                                                                                                                                                                                                                                                                                                                                                                acid; RNA cleavage; hepatitis C
interferon; DNAzyme.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Amson R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 12.8;
Pred. No. 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1; Length 17;
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RESULT 46
ANT54644/c
ID ANT546
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Best Local S
Matches 11
23-FEB-1994;
29-MAR-1994;
04-APR-1994;
07-APR-1994;
15-APR-1994;
15-APR-1994;
18-MAY-1994;
06-JUL-1994;
15-AUG-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICM-1; intercellular adhesion molecule; rel A; tumor necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-cabl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; strokerenosis; transplant rejection; rheumatoid arthritis; psoriasis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to an enzymatic nucleic acid molecule which specifically cleaves RNA derived from hepatitis C virus (HCV), in which the binding arms of the enzymatic nucleic acid molecule comprises sequences complementary to any of the defined substrate sequences given in the specification. The nucleic acid molecule may be administered for the treatment of HCV infections, especially in combination with type I interferons. The present sequence represents a HCV DNAzyme substrate
                                                                                                                                                                                                                                                                                 23-FEB-1995;
                                                                                                                                                                                                                                                                                                                                       31-AUG-1995
                                                                                                                                                                                                                                                                                                                                                                                              WO9523225-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mus musculus
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22-APR-1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mouse IL-5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 4 A; 6 C; 4 G; 0 T; 3 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (PAVC/) PAVCO P A. (MACE/) MACEJACK D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2004-031273/03
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hammerhead ribozyme target sequence (nt. position 975).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
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  94US-00201109.
94US-00218934.
94US-0022795.
94US-00224483.
94US-00227958.
94US-00228041.
94US-00245736.
94US-00245736.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В₽
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RESULT 47
ABH36274/C
ID ABH362
XX ABH362
XX ABH362
XX OBH362
XX OBH367
XX Oligon
XX Oligon
XX SNP; s
KW SNP; s
KW SP; s
KW Centra
XX

22-FEB-2002

(first

ABH36274;

ABH36274 standard;

DNA;

Oligonucleotide SEQ ID NO 236251 for

detecting

SNP TSC0057662

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

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Query Match
Best Local Similarity
Matches 13; Conserv

Conservative

0;

9.5%;

Score 12.4; Pred. No. 91; Mismatches

DB

1; 1;

Length 15; Indels

0

Gaps

0

31

TCTATCTAAACGGG

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16-AUG-1994
17-AUG-1994
19-AUG-1994
02-SEP-1994
08-SEP-1994
23-SEP-1994
23-SEP-1994
23-SEP-1994
03-OCT-1994
07-OCT-1994
11-OCT-1994
11-OCT-1994
                                    contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these maNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the II-5 target sequences and thereby inhibit II-5 expression, making them useful for treating chronic asthma, e.g. by inhibiting the synthesis of II-5 in lymphocytes and preventing the recruitment and activation of eosinophils. The ribozymes can also be used to treat eosinophilia (related to parasitic infection or with pulmonary infiltration) and L-tryptophan-associated eosinophilia-myalgia syndrome. (Updated on 25-MAR-2003 to correct PI
                                                                                                                                                                                                                                                                                                                                                                  Grimm
Modak
Tracz
Sequence 15
                                                                                                                                                                                       The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-s) mRNA at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that
                                                                                                                                                                                                                                                                                        Ribozymes having modified bases and in inhibiting disease related genes.
                                                                                                                                                                                                                                                                                                                                    WPI; 1995-351090/45.
                                                                                                                                                                                                                                                                 Claim
                                                                                                                                                                                                                                                                                                                                                                                                              Stinchcomb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10-NOV-1994;
28-NOV-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                           (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                 ν
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                                                                                                                                                                                                                                                                                                                                                               b DT, Chowrira B, Direnzo A, Draper KG,
Karpeisky A, Kisich K, Matulic-Adamic J,
Pavco P, Beigleman L, Sullivan SM, Sweed
Usman N, Wincott FE, Woolf T;
BP; 4 A;
                                                                                                                                                                                                                                                               221;
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94US-00316771.
94US-00319492.
94US-00321993.
94US-00334847.
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94US-00292620.
94US-00293520.
94US-00300000.
94US-00303039.
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94US-00345516.
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94US-00363233.
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94US-00311749.
                                                                                                                                                                                                                                                              407pp; English.
4 C; 3
G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                          methods
                                                                                                                                                                                                                                                                                                          for
                                                                                                                                                                                                                                                                                                                                                                                  Sweedler D,
                                                                                                                                                                                                                                                                                                          producing
                                                                                                                                                                                                                                                                                                                                                                                                              Dudycz LW;
                                                                                                                                                                                                                                                                                                                                                                                               Mcswiggen JA;
                                                                                                                                                                                                                                                                                                          them
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Best Local S
Matches 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotine polymorphisms (SNP) and cytosine methyletion status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; SEQ ID NO 236251; 29pp + Sequence Listing; German
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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Olek A,
                                                                                                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
                                                                                                                                                                                                                                               Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-OCT-2001.
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                                                      07-APR-2000; 2000DE-01019173
                                                                                06-APR-2001; 2001WO-IB000713.
                                                                                                                                      WO200177384-A2
                                                                                                                                                                Homo sapiens
                                                                                                                                                                                          central
                                                                                                                                                                                                                                                                          22-FEB-2002
                                                                                                                                                                                                                                                                                                                               ABH36275 standard; DNA; 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 13 BP; 2 A; 1 C; 6 G; 4 T; 0 U; 0 Other;
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                            (EPIG-)
                                                                                                            18-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (EPIG-)
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                            EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
 Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                    AACGACTATCCC 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                          (first
                                                                                                                                                                                          system; gastrointestinal; respiratory; immune; metabolic
                                                                                                                                                                                                                                               SEQ ID NO 236252 for detecting SNP TSC0057662.
                                                                                                                                                                                                                                                                          entry)
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 Berlin
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 12; DB; Pred. No. 1e+
0; Mismatches
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Best Local S
Matches 12
                                                                                                                                                                               acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 ABC09989, ABF00010-ABF9989, ABH00010-ABF9989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                         Set of oligonucleotides, useful for diagnosis and designed to detect single-nucleotide polymorphisms methylation status.
                                                                                                                                 Sequence 13
                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; SEQ ID NO 236252; 29pp + Sequence Listing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI;
                                                                                                                                                                   ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                           invention describes novel oligonucleotide primers or peptide nucleic
                              118 AACGACTATCCC 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2001-657177/75
N
                                                                               Similarity
AACGACTATCCC 13
                                                                                                                                   BP; 4 A; 6 C; 1 G; 2 T; 0 U; 0 Other;
                                                                 Conservative
                                                                               100.0%;
                                                                                                   9.2%;
                                                                 0,
                                                               Score 12; DB; Pred. No. 1e+
                                                                               DB 1;
1e+02;
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s and
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RESULT 49
AB199108
ID AB199
XX AB199
XX AB199
XX Human
XX Human
XX Human
XX Homo
XX A11el
XX Hof-JU
XX Hof-JU
XX Hof-JU
XX Hof-JU
XX Hof-JU
XX Hof-JU
XX CENA
XX WPI;
XX WPI;
XX CENA
XX CENA
XX TOTAL
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; PCDH2; protocadherin 2; haplotyping; polymorphic variant; single nucleotide polymorphism; cytostatic; cancer; chromosome 5s allele-specific oligonucleotide; ASO; PCR primer; 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human PCDH2 ASO PCR primer SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABI99108;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sapiens.
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The invention relates to haplotyping the protocadherin 2 (PCDH2) gene, comprising determining which of the haplotypes given in the specification defines one or both copies of the individual's pCDH2 gene. The polymorphisms are within a 30244 base pair sequence (ABA05413), fully

New protocadherin 2 (PCDH2) polymorphic variants and encoding genes, useful in expressing PCDH2 protein for screening candidate drugs to diseases related to PCDH2 activity.

treat

Claim

16;

Page

14;

127pp; English.

Kliem SE,

Koshy B,

Tanguay DA

2002-097928/13.

06-JUN-2000; 2000US-0209564P.

(GENA-) GENAISSANCE

PHARM INC

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RESULT 50
AAX31622
ID AAX31
XX AAX31
XX AAX31
XX Tag 8
XW Tag 8
XW Tag 8
XW diagn
XX Homo
XX W0985
PN W0985
PN W0985
XX U7J(
XX WPI;
PR 20-MJ
XX WPI;

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Best Local S
Matches 12
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                                                          AAX30947-31815 represent tag sequences of transcripts that are differentially expressed in colorectal cancer, in pancreatic cancer, or in both. The tag sequences can be used to identify genes by matching the tag to a gen data base member, or by using the tag sequences as probes to isolate unidentified genes from cDNA libraries. The tag sequences can also be used in a method for diagnosing colon or pancreatic cancer in a sample suspected of being neoplastic. The method comprises comparing the level of at least one transcript in a first sample of a tissue to a second sample, where the first sample is a colonic tissue suspected of being neoplastic and the second sample is a normal human colonic tissue. The transcript is identified by a tag selected from AAX30947-31815. The methods of the invention can be used in the diagnosis, prognosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Use of isolated gene transcripts - useful for developing products diagnosis, prognosis and treatment of cancers, particularly colon pancreatic cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tag sequence; colorectal cancer;
diagnosis; prognosis; treatment;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 15 BP; 2
                                           treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-MAY-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tag sequence of a transcript increased in pancreatic cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-MAY-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Vogelstein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13; Page 65; 120pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                           cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kinzler KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97US-0047352P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98WO-US010277.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð,
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85.7%;
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Pred. No. 98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5 T; 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      pancreatic cancer; colon cancer;
ss.
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104 GCAGATAAATGCCTA 118

Query Match Best Local S Matches 13

Similarity

9.0%;

Score 11.8; DB 1; Length 15; Pred. No. 1e+02;

Conservative

0

Mismatches

Indels

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Gaps

0

Sequence 15

BP; 3 A; 5 C; 3 G; 0 T;

4 U;

0 Other;

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RESULT 51
AAZ62880/c
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                                 The present sequence represents the preferred target sequence of an CC enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves the Hepatitis C virus (HCV) RNA sequence at the base position given in the descriptor line. The HCV sequence was screened for optimal ribozyme ctarget sites using a computer folding algorithm and regions of the mRNA which did not form secondary folding structures and contained potential ribozyme cleavage sites were identified. Ribozymes were synthesised to target these sites and their activities optimised by either varying the C length of the binding arms or by modification to prevent degradation by nucleases. The ribozymes of the invention inhibit gene expression and/or viral replication, and are used to treat diseases associated with hepatocellular carcinoma. The ribozymes may be used in combination with interferon to treat HCV infection, other infectious diseases, autoimmune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                      27-APR-1998;
18-SEP-1998;
25-FEB-1999;
23-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 15 BP; 3 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                        Claim 1; Page 66; 123pp; English
                                                                                                                                                                                                                                                                 hepatitis
                                                                                                                                                                                                                                                                                Novel ribozymes for the treatment
                                                                                                                                                                                                                                                                                                         WPI; 2000-062023/05
                                                                                                                                                                                                                                                                                                                                  Blatt L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9955847-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hepatitis C virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cirrhosis; liver failure; hepatocellular carcinoma; interferon; cancer; autoimmune disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Enzymatic nucleic acid; hammerhead ribozyme; virus replication;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Substrate for HH ribozyme HCV-9353 which cleaves HCV RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAZ62880 standard;
                                                                                                                                                                                                                                                                                                                                                             (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   85 CATCGTCTTGATGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13;
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                          and
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                                                                                                                                                                                                                                                                                                                                  Mcswiggen JA,
                                                                                                                                                                                                                                                                    infection.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                          cancer
                                                                                                                                                                                                                                                                                                                                                                                      98US-0083217P.
98US-0100842P.
99US-00257608.
99US-00274553.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        99WO-US009027.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RNA;
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                                                                                                                                                                                                                                                                                                                                    Roberts
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Pred. No. 1
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f
                                                                                                                                                                                                                                                                                  diseases
                                                                                                                                                                                                                                                                                                                                    Pavco PA,
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                                                                                                                                                                                                                                                                                  and
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 15;
                                                                                                                                                                                                                                                                                  conditions related
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15

GCAGGTAGATGCCTA 1

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RESULT 52
AAP47620/c
ID AAP476
XX IGPBP3
XX AAP476
XX IGPBP3
XX Homo 8
XX Homo 12
XX Homo 12
XX INFILIAN
XX 
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                                                                                                                           Query Match
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                                                                                                                                                                                                                                                                                                           oligonucleotides of the present invention (see ARF45151 and ARF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention relates to a method for ameliorating the effects skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [GF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP], which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityrissis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                           Sequence 15 BP; 5 A; 4 C; 4 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 7; Page 50; 201pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-041421/05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21-JUN-2000; 2000WO-AU000693.
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15
                                                          93 TGATGCCCTTGGCAG 107
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                                                                                                                                                              Similarity
                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Werther
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                                                                                                                                                          9.0%;
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                                                                                                                                                          Pred.
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                                                                                                                               Mismatches
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RESULT

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ABK325
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AC ABK325
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AC ABK325
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DT 23-APJ
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Human
XW
Human
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Homo
YX
Homo
RESULT 54
ABX00731/c
ID ABX0077
XX ABX007
XX ABX007
XX ABX007
XX ABX007
XX ABX007
XX Enzyma
KW Enzyma
KW HCV xi
KW liver
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                                                                                                          Enzymatic nucleic acid; RNA cleavage; Hepatitis C virus infection; HCV ribozyme; HCV expression; HCV replication; cirrhosis; virucide; liver failure; hepatocellular carinoma; HCV infection; drug therapy; type I interferon; interferon alpha; interferon beta; cytostatic; interferon gamma; consensus interferon; hepatotropic; antiinflammatorsubstrate; hammerhead ribozyme; HH ribozyme; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 15 BP; 3 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human pancreatic cancer SAGE tag #128.
                                                         Hepatitis C virus.
                                                                                                                                                                                                                                                                                                        Hepatitis
                                                                                                                                                                                                                                                                                                                                                               23-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                      ABX00731;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SAGE tags of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to an isolated,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Col 77; 161pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New human nucleic acid containing specific SAGE tags, diagnostic markers for cancer, also derived probes.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20-MAY-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cancer marker;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (UYJO ) UNIV JOHNS HOPKINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         85 CATCGTCTTGATGCC 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ب
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          analysis of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATGGTCTTGAAGCC
                                                                                                                                                                                                                                                                                                        C virus substrate #513 for HCV hammerhead ribozyme #513.
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                                                                                                                                                                                                                                                                                                                                                               (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         86.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 11.8; DB Pred. No. 1e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     purified human nucleic acid found in humans and is a SAGE
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                                                                                                                                             antiinflammatory;
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ABC28016
ID ABC28
XX ABC280
AC ABC28
XX 20-FE
XX 20-FE
XX SNP;
KW Pepti
KW Pepti
KW Centr
XX Y
XX W0200
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XX W0200
XX W05-AF
XX W06-AF
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Matches 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (HP) motif where the binding arms comprise sequences complementary to one of the substrate sequences defined in the specification. The HCV ribozymes are useful for modulating the expression and/or replication of HCV. They can be used to treat cirrhosis, liver failure and/or hepatocellular carcinoma. The HCV ribozymes are also useful for treating a condition associated with HCV infection in conjunction with one or more other drug therapies, particularly type I interferon, especially interferon alpha, beta or gamma or consensus interferon. The present sequence represents a substrate for a HCV hammerhead (HH) ribozyme. Note: Some of the sequence data for this patent did not form part of the printed specification. The complete sequence data for this patent was obtained in electronic format directly from the USPTO web site at
                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; peptide nucleic acid; cytosine methylation; cardiovascular; primer; central nervous system; gastrointestinal; respiratory; immune; metal
                 06-APR-2001; 2001WO-IB000713
                                                 18-OCT-2001.
                                                                               WO200177384-A2
                                                                                                                                                                                                                Oligonucleotide SEQ ID NO 28033 for detecting SNP TSC0007915.
                                                                                                                                                                                                                                                                                 ABC28016;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 15 BP; 3 A; 5 C; 3 G; 0 T; 4 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New ribozymes targeting RNA derived from hepatitis C virus inhibit viral replication and are useful to treat hepatitis C virus infections and
                                                                                                                                                                                                                                                 20-FEB-2002
                                                                                                                                                                                                                                                                                                                  ABC28016 standard; DNA; 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention relates to enzymatic nucleic acids which specifically cleave RNA derived from Hepatitis C virus (HCV)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cirrhosis, liver failure or hepatocellular carcinoma.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Blatt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin
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                                                                                                               sapiens.
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) MCSWIGGEN J A.
) ROBERTS B.
) PAVCO P A.
) MACEJACK D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                               (first entry)
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                                                                                                                                              gastrointestinal; respiratory; immune; metabolic
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RESULT 56
ABC53209
ID ABC53303
XX ABC53
XX ABC53
XX D1 21-FE
XX SNP;
KW Pepti
KW centr
XX Homo
XX WO200
XX WO200
XX WO200
XX WO200
XX WO210
PR 06-AF
XX O7-AF
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                               Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH30073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                   Oligonucleotide SEQ ID NO 53226 for detecting SNP TSC0014704.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Set of oligonucleotides, useful for diagnosis and cell designed to detect single-nucleotide polymorphisms and methylation status.
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Pred. No. 1.2e+02;
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for disgnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this pattent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                          Sequence
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                                                                                                    Score 11.4; D
Pred. No. 1.2e
0; Mismatches
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RESULT

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Matches 12; Conserv
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                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic
                                                                                                                                               Oligonucleotide
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                                                                                                                                                                                                                                                                                                                       ABC13513 standard; DNA; 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; SEQ ID NO 35914; 29pp + Sequence Listing; German.
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                                                                                                                                                                        06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                 18-OCT-2001
                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
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acid (PNA) oligomers for
and cytosine methylation
oligonucleotides are used
                                                                                                                                              Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                07-APR-2000; 2000DE-01019173
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; SEQ ID NO 197210; 29pp + Sequence Listing; German.
                                                                                         Claim 1; SEQ ID NO 150364; 29pp + Sequence Listing; German.
                                                                                                                             methylation status.
                                                                                                                                                                                                   WPI; 2001-657177/75.
                                                                                                                                                                                                                                        Olek A,
                                                                                                                                                                                                                                                                                                                                                  06-APR-2001; 2001WO-IB000713.
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invention describes novel oligonucleotide primers or peptide nucleic (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) eyrosine methylation status in chemically pretreated genomic DNA. The conucleotides are used for diagnosis and/or prognosis of cancer and a
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 11.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     for detecting SNP TSC0037941.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.2e+02;
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ABH33765/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        გ
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Matches 12
                                                                This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 ABE9989, ABF00010-ABF9989, ABF00010-ABF998
                                                                                                                                                                                                                                                                                                                                                                                                                             Set of oligonucleotides, useful for diagnosis and designed to detect single-nucleotide polymorphisms methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABE2073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABH33765 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 13 BP; 4 A; 6 C; 0 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                  Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Olek
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; peptide nucleic acid; cytosine methylation; cardiovascular; primer; central nervous system; gastrointestinal; respiratory; immune; metal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oligonucleotide SEQ ID NO 233742 for detecting SNP TSC0057049.
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                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 233742; 29pp + Sequence Listing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AACCACTATCCCT 13
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Query Match Best Local Similarity

8.7**%**; 92.3**%**; 4 C; 0

Score 11.4; Pred. No. 1.

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                                                                                                                                                                                                                                                        Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
ABC61347;
                                           ABC61347 standard;
                                                                                                                                                                                                                                                                                                                                                  Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                              Score 11.4;
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                                                                                                SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                  Oligonucleotide SEQ ID NO 13519 for detecting SNP TSC0003124.
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Set of oligonucleotides, useful for diagnosis and cell designed to detect single-nucleotide polymorphisms and
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RESULT 69
ABP50366/c
ID ABP503
XX ABP503
XX ABP503
XX ABP503
XX ABP503
AC ABP503
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AC ABP503
AC Oligon
XX SNP; s
XW Peptid
XW Centra
XX Homo s
XX WO2001
XX WDI; 2
XX WDI; 2
XX WDI; 2
XX Set of PT design
PT design
PT design
CC Taim
XX Set of PT design
CC Taigor
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Best Local Similarity
Matches 12; Conserv
                                                                                                                         Matches
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                                                                                                                                                                                                                                                                                       acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABP00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                             Sequence 13 BP; 3 A; 0 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 13 BP; 6 A; 0 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  data for this patent did not form part of the printed specification, was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; SEQ ID NO 150363; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-APR-2000; 2000DE-01019173
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21-FEB-2002
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                                                                                                                Local Similarity nes 12; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              invention describes novel oligonucleotide primers or peptide nucleic
13
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                                                         AACGACTATCCCT 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTTATACTTGTAA 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTTATACTTCTAA 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          system; gastrointestinal; respiratory; immune; metabolic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 150363
                                                                                                                                                   8.7%;
92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    entry)
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92.3%;
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                                                                                                                                                   Score 11.4;
Pred. No. 1
                                                                                                                         Mismatches
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                                                                                                                                                1.2e+02;
                                                                                                                                                                                   DB 1;
                                                                                                                                                                                Length 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
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SNP; single

nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

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RESULT 70
ABC81417
ID ABC81417
AC ABC81
XX ABC81
XX ABC81
XX ABC81
XX SNP;
XW SNP;
XW Pepti
KW Centr
XX Homo
XX Centr
XX Clain
RESULT 71
ABH00081
ID ABH00
XX ABH00
XZ ABH00
XZ
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Matches 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                    Oligonucleotide SEQ ID NO 200058 for detecting SNP TSC0049230.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Set of oligonucleotides, useful for diagnosis and cell designed to detect single-nucleotide polymorphisms and methylation status.
                                                                                                                                                                                                                                                                               ABH00081;
                                                                                                                                                                                                                                                                                                                                                                   ABH00081 standard; DNA; 13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TAATCTATCTAAA 40
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8.7%;
nilarity 92.3%;
Conservative
                                                                                                                                                                                 (first entry)
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Pred. No. 1.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ۲
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RESULT 72
ABF58084/c
ID ABF580
XX ABF580
XX ABF580
XX Oligon
XX SNP;
EX Oligon
XX SNP;
EX Centra
XX SNP;
EX Centra
XX SNP;
EX Homo 8
XX Homo 9
XX Homo 9
XX Homo 9
XX Homo 9
XX Homo 18-OC1
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Oligonucleotide SEQ ID NO 158081 for detecting SNP TSC0006685
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                               07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                                                          central nervous
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABF58084;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABF58084 standard; DNA; 13
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central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                               06-APR-2001; 2001WO-IB000713
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                                                                                                                                                                                                                                                                                                                                          system; gastrointestinal; respiratory; immune; metabolic
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92.3%;
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Pred. No. 1.2e+02;
0; Mismatches 1
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RESULT 73
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XX VACCENTI
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Matches 12
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                                                                                                           Set of oligonucleotides, useful for diagnosis and designed to detect single-nucleotide polymorphisms methylation status.
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Pred. No. 1.2e+02;
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This invention describes novel oligonucleotide primers or peptide nucleic

Claim 1; SEQ ID NO 132340; 29pp + Sequence Listing; German.

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RESULT 74
ABH01944/c
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XX ABH019
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XX SNP; g
KW Peptid
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                                                                                                         acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 ABC99989, ABF0010-ABB99989, ABH0010-ABB99989 and ABI00010-ABB182073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosin methylation status.
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No. 1.2e+02;
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Sequence 13 BP;

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A; 0 C; 2 G; 4 T; 0 U; 0 Other

RESULT 76 ABH02044/c ID ABH02044

standard; DNA; 13

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RESULT 75
ABHOOD80/c
ID ABHOOD
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XX SAP; E
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Matches 12; Conserv
                                                                                                                                                                                                                                                                                                              range of diseases including immune system, gastrointestinal, respirator central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC000-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, buwas obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                             Sequence 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1;
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                                                     TAATCTATCTAAA 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTTAATCTATCTA 1
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  TAACCTATCTAAA
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                                                                                                                                                                                                                             BP; 4 A; 0 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                              Conservative
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                                                                                                                                         8.7%;
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Pred. No. 1.2e+02;
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ABF580EF 77
ABF580ES ID ABF58
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XX 21-FE
XX Oligc
XX SNP;
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                                            SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; SEQ ID NO 202021; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Set of oligonuclectides, useful for diagnosis and cell typing, designed to detect single-nuclectide polymorphisms and cytosine methylation status.
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                Homo sapiens
                                                                                                              Oligonucleotide SEQ ID NO 158082 for detecting SNP TSC0006685.
                                                                                                                                              21-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 13 BP; 7 A; 0 C; 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-APR-2000; 2000DE-01019173.
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                                                                                                                                                                              ABF58085;
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0; Mismatches
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Pred. No. 1.2e+02;
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RESULT 78
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XX ABC280
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XX SNP; 8
KW peptid
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                                                                                                                                                                                                                                                                                                                                                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oligonucleotide SEQ ID NO 28034 for detecting SNP TSC0007915.
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                                                    Olek A,
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RESULT 79
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Best Local S
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  This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The
                                                                                                                                                                                                                                                     Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for disgnosts and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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Query Match Best Local S Matches 12

Similarity

92.3%; 8.7%;

Score 11.4; DB 1; Pred. No. 1.2e+02;

Length 13;

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                                                                                                                                                                                                                                                                                                                                                                                         Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07-APR-2000; 2000DE-01019173
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                                                                                                                                                                                                  Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                21-FEB-2002
                                            ABC81416;
                                                                                                                                                                                                                                                           Sequence 13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      designed to detect methylation status.
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                                                                       ABC81416 standard; DNA; 13
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92.3%;
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Pred. No. 1.2e
0; Mismatches
                                                                                                                                                                                                                                                           G; 6 T; 0 U; 0 Other;
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Set of oligonuclectides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
Sequence 13 BP; 5 A; 0 C; 1 G; 7 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-657177/75.
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S Query Match
Best Local Similarity
Matches 12; Conserv 28 TAATCTATCTAAA 40 Conservative 8.7%; <u>.</u> Score 11.4; DB 1; Pred. No. 1.2e+02; Mismatches Length 13; Indels 0 Gaps

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13

TAATCTATATAAA 1

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RESULT 83
ABF44034/c
ID ABF44034; standard; DNA; 13 BF
XX
AC ABF44034;
XX
C
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 144
XX
DE Oligonucleic acid; cytosii
XX
SNP; single nucleotide polyma
XX
Peptide nucleic acid; cytosii
XX
central nervous system; gast;
XX
PN W0200177384-A2.
XX
PD 18-OCT-2001.
XX
C5-AFR-2001; 2001W0-IB000713
                                                                                                                                                                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
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        06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                    gastrointestinal;
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                                                                                                                                                                                                                                                 detecting
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RESULT 84
ABF94136/c
ID ABF941
XX ABF941
XX ABF941
XX ABF941
XX SNP; E
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XX SNP; E
XW Peptic
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                                           Set of oligonucleotides, useful for diagnosis and cell designed to detect single-nucleotide polymorphisms and
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                          methylation status.
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RESULT 85
ABF94137
ID ABF94137
AC ABF94
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGAAATTATACCA 1
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92.3%;
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    Mismatches

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Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    diagnosis; PNA; cancer;
cardiovascular; primer;
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF99999, ABH00010-ABH99999, and ABI00010-ABI382073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

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RESULT 86
ABH01200/G
ID ABH01
XX Clair
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Best Local S
Matches 12
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Best Local 8
Matches 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Set of oligonucleotides, useful for diagnosis and cell designed to detect single-nucleotide polymorphisms and methylation status.
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                                                                                                                                                                                                                                                                             Sequence
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                                                                                                                                                                                                                                                                                                                                           was obtained in electronic format from W.
ftp.wipo.int/pub/published_pct_sequences
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   13
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   TAATATATCTAAA 1
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                                                                                                                                      Conservative
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92.3%;
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92.3%;
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                                                                                                                                   Score 11.4; DB 1; Length 13; Pred. No. 1.2e+02; O; Mismatches 1; Indels
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0; Mismatches
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Pred. No. 1
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RESULT 88
ABH20655
ID ABH20
XX ABH20
AC ABH20
XX Z2-FE
XX Z2-FE
XX Z19c
CX XX D19c
XX SNP;
XW Sept:
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Best Local S
Matches 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; peptide nucleic acid; cytosine methylation; cardiovascular; primer; central nervous system; gastrointestinal; respiratory; immune; metab
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                                                          Oligonucleotide SEQ
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                                                                                      22-FEB-2002
                                                                                                                 ABH20655
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                                                                                                                                                                                                                                                                                       Similarity
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                                                                                                                                             DNA;
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                                                          ID NO 220632 for detecting SNP TSC0053697.
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Pred. No. 1.
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                                                                                                                                                                                                                                                                                                   Length 13;
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rimer; 88;
; metabolic.
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

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RESULT 89
ABF97212/c
ID ABF972
XX ABF972
XX ABF972
XX SNP; B
COligon
XX SNP; B
KW Peptid
KW Centra
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                                                                                                            18-OCT-2001.
                                                                                                                                           WO200177384-A2
                                                                                                                                                                                                      peptide nucleic central nervous
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             methylation status.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Olek A,
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                    (EPIG-) EPIGENOMICS AG
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                                                                                                                                                                                                   single nucleotide polymorphism; human; diagnosis; PNA; ca:
ide nucleic acid; cytosine methylation; cardiovascular; pr
ral nervous system; gastrointestinal; respiratory; immune;
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92.3%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 11.4;
                                                                                                                                                                                                                                                                for detecting SNP TSC0048528.
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RESULT 90
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                                                                                             Set of oligonucleotides, useful for diagnosis and designed to detect single-nucleotide polymorphisms methylation status.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oligonucleotide SEQ ID NO 242878 for detecting SNP TSC0059278.
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                                                               Claim 1; SEQ ID NO 242878; 29pp +
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                                                                                                                                                                                                                                                                                                                                                                                                                        central nervous system;
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                                                                                                                                                                                                                            (EPIG-)
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Pred. No. 1.
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The

Sequence Listing; German.

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RESULT 91
ABH01201
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                               range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                    This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosiam methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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ftp.wipo.int/pub/published_pct_sequences
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92.3%;
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Pred. No. 1.2e+02;
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Query Match

Sequence 13 BP; 7 A; 1 C; 0 G; 5 T; 0 U; 0 Other;

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Score 11.4;

DB 1;

Length 13;

RESULT 93
ABH01945
ID ABH01
XX
AC ABH01

ABH01945 standard; DNA; 13

ВP

ABH01945;

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RESULT 92
ABF13690/c
ID ABF136
XX ABF136
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TCATCTATCTAAA 1
                                                                          TAATCTATCTAAA 40
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                                                                                                                                                                                                                                                                                                               BP; 5 A; 0 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry
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                                                                                                                                                         Score 11.4; DB 1;
Pred. No. 1.2e+02;
0; Mismatches 1
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                                                                                                                                                                                                                                    DB 1; Length 13;
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                                                                                                                                                             Indels
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                                                                                                                                                             Gaps
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RESULT 94
ABH02045
ID ABH02
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AC ABH02
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AC ABH02
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C ABH02
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Best Local S
Matches 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; peptide nucleic acid; cytosine methylation; cardiovascular; primer;
                                                                                                                                                                                                                                                                      Oligonucleotide SEQ ID NO 202022 for detecting SNP TSC0049666.
                                     WO200177384-A2
                                                                                                                                                                                                                                                                                                                                        22-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABH02045 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; SEQ ID NO 201922; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oligonucleotide
                                                                                          Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22-FEB-2002
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                                                                                                                                                      nervous
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP; 4 A; 2 C; 0 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
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                                                                                                                                                                                                                                                                                                                                     (first
                                                                                                                                                      system;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA; 13
                                                                                                                                                                                                                                                                                                                                     entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8.7%;
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                                                                                                                                                      gastrointestinal;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 201922 for detecting SNP TSC0049639
                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP.
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Pred. No. 1.2e+02
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1; Length 13;
                                                                                                                                                      respiratory;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
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Best Local S
Matches 12
                                                                                                                                                                                                                                                                 range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
AAT54959 standard;
                                                                                                                                                                                                                                                                                                                                                                                This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                 Sequence 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-OCT-2001
                                                                                                                                                                                                                                                 ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                 24
                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EPIGENOMICS
                                                                                                                 CTTGTAATCTATC 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID NO
                                                                                  CTTTTAATCTATC 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Piepenbrock C,
                                                                                                                                                                                                                 BP; 3 A; 3 C; 0 G; 7 T; 0 U; 0 Other;
                                                                                                                                                  Conservative
RNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    202022; 29pp + Sequence Listing;
                                                                                                                                                                8.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Berlin
                                                                                                                                                  <u>,,</u>
                                                                                                                                                 Score 11.4; DB 1;
Pred. No. 1.2e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7
                                                                                                                                                                                  Length 13;
                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        German.
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                                                                                                                                                  Gaps
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AAT54959/C
ID AAT54959/C
ID AAT5499
XX AAT549
AC AAT549
AC AAT549
AC AAT549
AC AAT549
AC AAT649
AC AAT649
AC AAT649
AC AAT640
AC ACA6
AC ACA6
KW Enzyma
KW TNF-11
KW TAL6
KW TAL6 Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha, respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; autoimmune disease; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; 31-AUG-1995 25-MAR-2003 07-APR-1997 23-FEB-1995; Mouse relA hammerhead ribozyme target sequence (nt. immunodeficiency (revised) (first entry) 95WO-IB000156 virus; acquired deficiency syndrome; AIDS; position 1588).

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RESULT 96
AAT57042/
ID AAT5
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                                                                                                                                                                                  CC The present sequence represents a preferred target sequence for an CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves relA mRNA at the CC nucleotide base position indicated in the DE line. The relA gene product is a subunit of the transcriptional regulator NF-kappaB and is implicated CC specifically in the induction of inflammatory responses. Regions of the CC mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences CC were designed and synthesised with modifications that improve their CC nuclease resistance. The ribozymes are designed to cleave the target sequences and thereby inhibit relA expression, making them potentially CC useful for treating rheumatoid arthritis, restenosis and asthma as well composuppressive properties of a ribozyme that cleaves relA mRNA means CC that uses are limited to local delivery, acute indications or ex vivo treatment. (Updated on 25-MAR-2003 to correct PI field.)
                                                                                                                             Query Match
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Matches 12
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Grimm S, K
Modak A, P
Tracz D, U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-FBB-1994

29-MAR-1994

04-APR-1994

15-APR-1994

15-APR-1994

15-APR-1994

16-MAY-1994

16-AUG-1994

17-AUG-1994

17-AUG-1994

19-AUG-1994

23-SEP-1994

23-SEP-1994

23-SEP-1994

23-SEP-1994

23-SEP-1994

21-OCT-1994

07-OCT-1994

07-OCT-1994

07-OCT-1994

07-OCT-1994

01-NOV-1994

10-NOV-1994

16-DEC-1994

16-DEC-1994

16-DEC-1994
              AAT57042
                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ribozymes having modified bases and methods in inhibiting disease related genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (RIBO-)
                                        96
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                                                                              14
                                                                                                     48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RIBOZYME
                                                                                                                                            Similarity
                                                                                                                                                                                  15
                                                                                           CCTCTCTAGTAGA 60
                                                                                                                                                                                                                                                                                                                                                                                                                                Page 226; 407pp; English
              standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pavco P,
Usman N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DT, Chowrira B, Diren
Karpeisky A, Kisich K,
Pavco P, Beigleman L,
Usman N, Wincott FE, W
                                                                                                                                                                               BP;
                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              94US-00201109

94US-0022795

94US-0022795

94US-0022795

94US-00227960

94US-00227960

94US-00227960

94US-0029132

94US-0029143

94US-0029143

94US-0029143

94US-0030100

94US-0030100

94US-00311749

94US-0031439

94US-00314397

94US-00314397

94US-00314397

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94US-00314397

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94US-00314397
                                                                                                                                                                                3 A; 4 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PHARM INC.
                                                                                                                                         8.7%;
                                                                                                                                                                                ഗ
                                                                                                                             Score 11.4; D
Pred. No. 1.1e
0; Mismatches
                                                                                                                              0
                                                                                                                                                                               G; 0 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Direnzo A, Draper KG, Dudycz
Ch K, Matulic-Adamic J, Mcswi
n L, Sullivan SM, Sweedler D,
FE, Woolf T;
                                                                                                                                                                               3 U;
                                                                                                                                         .1e+02;
                                                                                                                                                                                0 Other;
                                                                                                                                                        DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    for producing them
                                                                                                                                                     Length 15;
                                                                                                                              Indels
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J, Mcswiggen JA;
Thompson JD;
                                                                                                                              0
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                                                                                                                              Gaps
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Stinchcomb Grimm S, K Modak A, Pa Tracz D, U

DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW; Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA; Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson Usman N, Wincott FE, Woolf T;

ď,

(RIBO-)

RIBOZYME

PHARM INC.

DT,

Ribozymes havi in inhibiting

having modified bases and methods ting disease related genes.

for

producing

them

WPI; 1995-351090/45.

Claim

<u>ک</u>

Page

407pp; English.

The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves mRNA coding protein of respiratory syncytial virus (RSV) at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not

for a

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23-FBB-1994

29-MAR-1994

04-APR-1994

15-APR-1994

15-APR-1994

15-APR-1994

16-AUG-1994

17-AUG-1994

17-AUG-1994

17-AUG-1994

19-AUG-1994

23-SEP-1994

23-SE
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25-MAR-2003
24-APR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; Philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; transplant rejection; rkeumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-AUG-1995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Respiratory syncytial virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RSV 1C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hammerhead ribozyme target
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first
                                                                                                                                                                                                                                                                                                                                                                                                                  94US-00201109
94US-00218934
94US-0022795
94US-00228041
94US-00228041
94US-00228041
94US-00245736
94US-0029132
94US-0029132
94US-00291433
94US-00291433
94US-003011486
94US-00311749
94US-00311749
94US-00316771
94US-00316771
94US-00334516
94US-00334516
94US-00337507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95WO-IB000156.
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RESULT 97
ANTS7041/c
ID ANTS7041 E
XX
AC ANTS7041;
XX
AC ANTS7041;
XX
AC ANTS7041;
XX
AC ANTS7041;
XX
COPT 27-AUG-20(
DT 24-APR-19;
XX
COPT 25-APR-19;
XX
COPT 25-APR-19;
XX
COPT 23-FEB-19;
XX
COPT 24-COPT 24-CO
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Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
08-SEP-1994;
23-SEP-1994;
23-SEP-1994;
28-SEP-1994;
03-OCT-1994;
07-OCT-1994;
11-OCT-1994;
11-OCT-1994;
10-NOV-1994;
                                                                                                                                                                                                                     23-FBB-1994
29-MAR 1994
04-AFR-1994
07-AFR-1994
15-AFR-1994
15-AFR-1994
15-AFR-1994
16-AUG-1994
15-AUG-1994
16-AUG-1994
17-AUG-1994
17-AUG-1994
19-AUG-1994
19-AUG-1994
19-AUG-1994
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25-MAR-2003
24-APR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gene expression, downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; Philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the target sequences and can be used for treatment and diagnosis of RSV infection. (Updated on 25-MAR-2003 to correct PI field.) (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-AUG-1995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9523225-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Respiratory syncytial virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Enzymatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RSV 1C hammerhead ribozyme target sequence (nt. position 364).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   52 TCTAGTAGACAAT 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                standard; RNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCTAGTAGACCAT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             nucleic acid; ribozyme; trans cleavage;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP; 4 A; 2 C; 4
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(revised)
(first en
94US-00292620
94US-002093520
94US-00300000
94US-00303039
94US-00311486
94US-00311749
94US-00316771
94US-00316771
94US-0031993
94US-0031993
94US-00337608
                                                                                                                                                                                                                                                                                                94US-00224483.
94US-00227958.
94US-00228041.
94US-00245736.
94US-00271280.
94US-00291932.
94US-00291433.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 11.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ŏ.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             inhibition;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
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RESULT 98
AAX653300/c
ID AAX653
XX AAX653
XX ACC AAX653
XX
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Best Local S
Matches 12
20-APR-1995;
02-MAY-1995;
04-MAY-1995;
                                                                       23-DEC-1994;
23-DEC-1994;
17-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28-NOV-1994;
16-DEC-1994;
23-DEC-1994;
30-JAN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves mRNA coding for a protein of respiratory syncytial virus (RSV) at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the target sequences and can be used for treatment and diagnosis of RSV infection. (Updated on 25-MAR-2003 to correct PI field.) (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Grimm
Modak
Tracz
                                                                                                                                                  13-DEC-1994;
                                                                                                                                                                                                                                                                                                    W09618736-A2
                                                                                                                                                                                                                                                                                                                                                                                                   diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                       Arthritic condition; graft tolerance; immune response; target; cl. hammerhead ribozyme; hairpin ribozyme; huann, rabbit; mouse; coll. stromelysin; synovial membrane; joint; arthritis; osteoarthritis; rheumatoid arthritis; autoimmune disease; allergy; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAX65300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mouse B7-1 hammerhead ribozyme target SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ribozymes having modified bases and methods for in inhibiting disease related genes.
                                                                                                                                                                                                  22-NOV-1995;
                                                                                                                                                                                                                                                   20-JUN-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1995-351090/45.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                     88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP; 5 A; 2 C; 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
94US-00363253.
94US-00363254.
95US-00390850.
95US-00426124.
95US-00432874.
95US-00434509.
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94US-00357577.
94US-00363233.
95US-00380734.
                                                                                                                                                  94US-00354920.
                                                                                                                                                                                                  95WO-US015516.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     407pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 11.4; DB 1;
Pred. No. 1.1e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NO:1932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             producing them
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mcswiggen JA;
ler D, Thompson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          collagenase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cleavage;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ı
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RESULT 99
AAX652
AAX652
XX AAX652
XX AAX652
XX AOUSE
AC AOUSE
XX MOUSE
XX AITHI
KW A
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CC having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues

CC; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least

CC can inhibit collagenase and stromelysin production in the synovial

CC membrane of joints for the treatment or prevention of arthritis,

CC particularly osteoarthritis or rheumatoid arthritis. The ENA's can also

CC be used to treat antigen presenting cells of a donor to induce tolerance

CC in a recipient to an alloantigen of a donor. They can also be used for

CC treating graft tolerance or for treating autoimmune disease, and for

CC treating allergies and other inflammatory conditions. The ENA's can also

CC used in diagnosis. Ribozyme therapy impacts on the expression of

CC stromelysin without introducing the non-specific effects upon gene

CC The concentration of ribozyme required to affect a therapeutic treatment

CC specific. The present sequence is used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 12; Conserv
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07-JUL-1995;
07-AUG-1995;
05-OCT-1995;
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Mcswiggen
Karpeisky
                                                                                                                                                                                                                                                                                      Arthritic condition; graft tolerance; immune response; target; cleavage; hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase; stromelysin; synovial membrane; joint; arthritis; osteoarthritis; rheumatoid arthritis; autoimmune disease; allergy; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 15
                                22-NOV-1995;
                                                                                                                                                                                                                                                              diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Mouse B7-1 hammerhead ribozyme target SEQ ID NO:1931.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAX65299 standard; RNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           auto-immune
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nucleic acid molecules having a hammer-head motif - used for ment of arthritis, induction of graft tolerance or treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP; 5 A; 4 C; 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           diseases.
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Gustofson J, U
Thompson JD, M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        95US-0000951P.
95US-0000974P.
95US-00512861.
95US-00541365.
                                95WO-US015516
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Modak A, Burgin A;
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Pred. No. 1.1e.
0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.1e+02;
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RESULT 100
AAX31607/C
ID AAX316
XX
AC AAX316
XX
DT 21-MAY
DT Tag se
XX
Tag se
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CC having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues

CC; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least

CC can inhibit collagenase and stromelysin production in the synovial

CC membrane of joints for the treatment or prevention of arthritis,

CC particularly osteoarthritis or rheumatoid arthritis. The ENA's can also

CC be used to treat antigen presenting cells of a donor to induce tolerance

CC in a recipient to an alloantigen of a donor. They can also be used for

CC treating graft tolerance or for treating autoimmune disease, and for

CC treating allergies and other inflammatory conditions. The ENA's can also

CC be used in diagnosis. Ribozyme therapy impacts on the expression of

CC to be used in diagnosis. Ribozyme therapy impacts on the expression of

CC expression which accompany treatment with retinoids and dexamethasone.

CC The concentration of ribozyme required to affect a therapeutic treatment

CC is lower than that required of antisense molecules, and is highly

CC research inverting
                                                                                                                                                                                                                                                                                                                                                            Matches
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07-JUL-1995;
07-JUL-1995;
07-AUG-1995;
05-OCT-1995;
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02-MAY-1995;
04-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13-DEC-1994;
23-DEC-1994;
23-DEC-1994;
17-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Beigelman
Mcswiggen
Karpeisky
                                                                                                                                                                                                                    AAX31607
                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Enzymatic nucleic acid molecules having a hammer-head motif - used for the treatment of arthritis, induction of graft tolerance or treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1996-300653/30.
                                                                            Tag sequence; colorectal cancer; pancreatic cancer; colon cancer;
diagnosis; prognosis; treatment; ss.
                                                                                                                       Tag sequence of a transcript increased in pancreatic cancer
                                                                                                                                                        21-MAY-1999
                                                                          diagnosis; prognosis; treatment;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (RIBO-)
                                                                                                                                                                                                                                                                                                                             87
                                                                                                                                                                                                                                                                                                                                                        12;
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                                                                                                                                                                                                                                                                                                                TCGTCTTGATGCC 99
                                                                                                                                                                                                                    standard;
                                                                                                                                                                                                                                                                                                TCGTATTGATGCC 3
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                                                                                                                                                                                                                                                                                                                                                                                                                      BP; 5 A; 4 C; 3 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  diseases.
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                                                                                                                                                        (first
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95US-00432874.
95US-00434509.
95US-0000951P.
95US-0000974P.
95US-00512861.
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94US-00363253.
94US-00363254.
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                                                                                                                                                                                                                  DNA; 15
                                                                                                                                                                                                                                                                                                                                                                       8.7%;
92.3%;
                                                                                                                                                      entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Usman
Modak
                                                                                                                                                                                                                                                                                                                                                          <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                       Score 11.4; DB 1
Pred. No. 1.1e+02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Jarvis T, Draper K,
sman N, Wincott F, N
odak A, Burgin A;
                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                       Length 15;
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WO9853319-A2

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RESULT 101
AAF48426/c
ID AAF484
XX AAF484
XX AAF484
XX AAT484
XX AAT486
DT 30-MAR
XX AAT486
XX Gytost
XX Gytost
XX Gytost
XX Homo s
XX Homo s
XX WO2000
XX 28-DEC
XX 21-JUN
XX 21-JUN
XX AMAT86
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Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAX30947-31815 represent tag sequences of transcripts that are differentially expressed in colorectal cancer, in pancreatic cancer, or in both. The tag sequences can be used to identify genes by matching the tag to a gen data base member, or by using the tag sequences as probes to isolate unidentified genes from cDNA libraries. The tag sequences can also be used in a method for diagnosing colon or pancreatic cancer in a sample suspected of being neoplastic. The method comprises comparing the level of at least one transcript in a first sample of a tissue to a second sample, where the first sample is a colonic tissue suspected of being neoplastic and the second sample is a normal human colonic tissue. The transcript is identified by a tag selected from AAX30947-31815. The methods of the invention can be used in the diagnosis, prognosis and
                                                                                                                                                                                                                      Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease;
                                   21-JUN-1999;
                                                                     21-JUN-2000; 2000WO-AU000693
                                                                                                                                        WO200078341-A1.
                                                                                                                                                                                                                                                                                                                                                                                                 30-MAR-2001
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                                                                                                                                                                                                            neovascular condition of the
                                                                                                                                                                                                                                                                                                                                                                 IGFBP3
                                                                                                                                                                                                                                                                                                                                                                                                                                  AAF48426
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-MAY-1997;
     (MURD-)
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                                                                                                                                                                        sapiens.
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                                                                                                                                                                                                                                                                                                                                                                 oligonucleotide #1846.
   MURDOCH CHILDRENS RES
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGACAATCCCATG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Off,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Page 64; 120pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  prognosis cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cancer
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                                     99US-0140345P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8.7%;
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                                                                                                                                                                                                            retina;
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Pred. No. 1.1e+02;
       INST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                            88.
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RESULT 102
AAF48427/c
ID AAF484
XX AAF484
XX AAT18e
AC IGFBP3
XX AAT18e
KW CYtost
KW EXION
KW EXION
KW IGFWT
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XX HOMO B
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              oligonuclectides of the present invention (see AAP45151 and AAP45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
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                                                                   Wraight CJ,
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hyperneovascular condition; hyperplasia; kidney
neovascular condition of the retina; ss.
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                                                                      Edmondson SR;
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Pred. No. 1.1e+02;
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Matches 12
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Amellorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
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0

Example 7; Page

201pp;

English

inflammation.

Ameliorating the effects

JV (ultra-violet) treatment inhibits or reduces growth

of a disorder, e.g. psoriasis, by administering ent (optional) and an antisense nucleic acid that the factor mediated cell proliferation and/or

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The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFB9]-2 or IGFB93), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an coligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense (aligonucleotide of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia
                                                 Query Match
Best Local S
Matches 12
95
                                                                            Similarity
                                                                                                                                                            15
ATGCCCTTGGCAG 107
                                                                                                                                                      вÞ;
                                                      Conservative
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                                                                                                                                                         Α,
                                                                            8.7%;
92.3%;
                                                                                                                                                         4 C; 4
                                                                                                                                                         <u>.</u>
                                                    <u>,,</u>
                                                                            Score 11.4;
Pred. No. 1.
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                                                      Mismatches
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                                                                            No. 1.1e+02
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                                                                                                        DB 1;
                                                                                                                                                            Other;
                                                                                                     Length
                                                      Indels
                                                                                                        15;
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                                                    Gaps
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밁
                                                                                    AAF48425;
                                                                                       AAF48425 standard; DNA; 15
                                                                                30-MAR-2001
                                                                           IGFBP3 oligonucleotide #1845.
                                                                                                  14
                                                                                                  ATGTCCTTGGCAG 2
                                                                                (first
                                                                               entry)
                                                                                       ВP
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Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; kelo skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasi IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris growth factor mediated cell proliferation; ichthyosis; serborrhoea; rugrowth facto keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss. pityriasis; pilaris; keloid;

WO200078341-A1 Homo sapiens.

21-JUN-1999; 99US-0140345P 21-JUN-2000; 2000WO-AU000693.

MURDOCH CHILDRENS RES INST.

Ś Werther Ģ, Edmondson SR

WPI; 2001-041421/05

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or

Example 7; Page 56; 201pp; English

The present invention relates to a method for ameliorating the effects skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of of f

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                                                                                                                                                                               Query Match
Best Local S
Matches 12
                                                                                                                                                                                                                                                                                             inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
AAS19622
                                AAS19622 standard;
                                                                                                                                                                                                                                                 Sequence 15
                                                                                                                                                                                                                                                                              vessels or any other hyperplasia
                                                                                                                 15
                                                                                                                                              83
                                                                                                                                                                                                  Similarity
                                                                                                                                                AGCATCGTCTTGA 95
                                                                                                                 AGCTTCGTCTTGA
                                                                                                                                                                                                                                                 BP; 6 A; 4 C; 3 G; 2 T;
                                                                                                                                                                                 Conservative
                                DNA;
                                                                                                                                                                                               8.7%;
92.3%;
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                                15
                                BP.
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                                                                                                                                                                                               Score 11.4;
Pred. No. 1
                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                 0 U;
                                                                                                                                                                            1;
                                                                                                                                                                                                                                                 0 Other;
                                                                                                                                                                                                                  DB 1;
                                                                                                                                                                                                                Length 15;
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RESULT 106
AAS19622
ID AAS196
XX AAS196
XX AAS196
XX AAS196
XX AAS196
XX AAS196
XX Homan;
XX Homo g
XX Geno;
XX Geno;
XX Geno;
XX Geno;
XX Geno
XX Gene
CC Gene
CC Syps

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200179239-A2
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17-APR-2001; 2001WO-US012453. 17-APR-2000; 2000US-0197978P. (GENA-) GENAISSANCE PHARM INC. Choi JY, Denton RR, Nandabalan K, Sausker

Genotyping human Growth hormone releasing hormone receptor gene of individual for determining haplotype of individual by determining identity of nucleotide pair at specific polymorphic sites for two copies WPI; 2002-066342/09

Claim 16; Page 14; 90pp; English of gene.

The present invention relates to novel single nucleotide polymorphisms (SNPs) in the human growth hormone releasing hormone receptor (GHRHR) gene located on chromosome 7p14, and methods for haplotyping and/or genotyping the GHRHR gene. The methods of the invention make use of allele-specific oligonucleotides (ASOs) as probes and primers and/or primer-extension oligonucleotides for detecting the GHRHR gene polymorphisms. The polymucleotides and screened compounds are useful for the treatment of diseases associated with GHRHR activity, such as isolated growth hormone deficiency (IGHD) and pituitary adenomas. AAS19622-AAS19647 represent ASO primers for detecting human GHRHR gene polymorphisms ę

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RESULT 108
ABI21898/c
ID ABI218
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AC ABI218
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DT 22-FEB
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Matches 12
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Best Local
                                                                                                                                                                                                                                      The invention relates to an isolated, purified human nucleic acid (I) that has the same sequence as a mRNA found in humans and is a SAGE (serial analysis of gene expression) tag comprising a single stranded probe containing at least 10 consecutive nucleotides. SAGE tags, are diagnostic and prognostic markers of cancer, especially of the colon and pancreas. ABK31900-ABK32770 represent human colon and pancreatic cancer SAGE tags of the invention
                                                                                                                                                                                                                                                                                                                                                             New human nucleic acid containing specific SAGE tags, useful diagnostic markers for cancer, also derived probes.
                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-153821/20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           serial analysicancer marker;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human pancreatic cancer SAGE tag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 15
             22-FEB-2002
                                    ABI21898;
                                                           ABI21898 standard;
                                                                                                                                                                                                                 Sequence 15 BP; 2 A; 2 C; 6
                                                                                                                                                                                                                                                                                                                                     Disclosure; Col
                                                                                                                                                                                                                                                                                                                                                                                                                        Vogelstein B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-MAY-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US6333152-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABK32561 standard; DNA; 15 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                               (UYJO ) UNIV JOHNS HOPKINS
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                                                                                                                                                                             y Match 8.7%;
Local Similarity 92.3%;
                                                                                                                      13
                                                                                                                                          58 AGACAATCCCGTG 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     colon cancer; colorectal cancer; pancreatic cancer; SAGE tag; analysis of gene expression; diagnostic; prognostic; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCAGAGTAGAAGGYG 15
                                                                                                                      AGACAATCCCATG 1
                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8.7%;
ilarity 80.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP; 5 A; 2 C; 6 G; 1 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
            (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98US-00081646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98US-00081646
                                                                                                                                                                                                                                                                                                                                    76; 161pp; English.
                                                          DNA; 12 BP
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                                                                                                                                                                                                                 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                       Zhang
                                                                                                                                                                   0;
                                                                                                                                                                             Score 11.4; DB 1;
Pred. No. 1.1e+02;
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1; Mismatches
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                                                                                                                                                                                           DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1; Length 15;
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABH2073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
Sequence 12 BP; 3 A; 0 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-APR-2000; 2000DE-01019173.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-APR-2001; 2001WO-IB000713.
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                                                                                ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (EPIG-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2001-657177/75
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 321871; 29pp + Sequence Listing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Berlin
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      German.
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Query Match Best Local Similarity Matches 11; Conserv 73 AAATTATACCA 83 Conservative 8.4%; 0; Score 11; Pred. No. Mismatches DB 1; L 1.3e+02; 0 Length 12 Indels <u>.</u> Gaps

0

밁 S ABH80958 standard; 12 AAATTATACCA 2 DNA; 12 ВP

RESULT 109
ABH80958/C
ID ABH809
XX ABH809
XX ABH809
XX Oligon
XX Oligon
XX Oligon
XX Opeptid
KW SNP; 8
KW Centra
XX Centra
XX Homo 6
XX Centra
XX Homo 6
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; Oligonucleotide primer SEQ ID NO 280951 Homo sapiens. central nervous aystem; gastrointestinal; for detecting SNP TSC0009274.

22-FEB-2002 **АВН80958**;

(first

entry)

18-OCT-2001

06-APR-2001; 2001WO-IB000713.

Claim 1; SEQ

ID NO 376759; 29pp + Sequence Listing; German.

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RESULT 110

RESULT 110

RBI76786

ID ABI767

XX ABI767

XX ABI767

XX SNP; g

KW Peptid

KW Centra

XX Homo g

XX WO2001

XX WO2001

XX WO2001

XX UFF 06-APF

XX UFF 07-APF

XX WPI; 2

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Best Local S
Matches 11
                 Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosin methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 ABC99889, ABF00010-ABF99889 and ABI0010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                   07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                 06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                             18-OCT-2001.
                                                                                                                                                                                                                                                            WO200177384-A2
                                                                                                                                                                                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; peptide nucleic acid; cytosine methylation; cardiovascular;
                                                                                                                                                                                                                                                                                                                                                                              Oligonucleotide primer SEQ ID NO 376759 for detecting SNP TSC0005783.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          methylation status.
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                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                      central nervous
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                                                                                                                                                                                                                                                                                                                                                                                                                                           ABI76786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABI76786 standard;
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                                                                                                                                       (EPIG-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 invention describes
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                                                                                                                                       EPIGENOMICS
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100.0%; Pr
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RESULT 111
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                       This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for disgnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detectular and metabolic disorders. BC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but
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                                                                                                                                                                                                                                                                                                                                                                                                                                               Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SNP:
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RESULT 113
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RESULT 114
ABI70304/c
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ftp.wipo.int/pub/published_pct_sequences
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                                                                                             ID NO 370277 for detecting SNP TSC0058089.
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; peptide nucleic acid; cytosine methylation; cardiovascular; central nervous system; gastrointestinal; respiratory; immur

primer; ss;

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RESULT 115
ABI19205/c
ID ABI192
XX ABI192
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                         SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                      07-APR-2000; 2000DE-01019173
                                                                                                                                            06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Oligonucleotide primer SEQ ID NO 319178 for detecting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABI19205 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
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                                (EPIG-) EPIGENOMICS AG
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Pred. No. 1.3e+02;
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RESULT 116
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XX SNP; a
KW Peptid
KW Centra
OS Homo &
YX WO2001
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XX O18-OC7
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Matches 11; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; 88;
                                                                                                                                                                                                      Set of oligonucleotides, useful for diagnosis and cell designed to detect single-nucleotide polymorphisms and
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                                                                                                                       Claim 1;
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central nervous system; gastrointestinal; respiratory;
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ilarity 100.0%; Pred. No. 1.3e+02;
Conservative 0; Mismatches 0;
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The

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RESULT 117
ABIO4248
ID ABIO424
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                                                                                                                      This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABP00010-ABF9989, ABP00010-ABF9989, ABP00010-ABF9989, ABF00010-ABF9989, ABF00010-ABF99989, ABF00010-ABF99989, ABF00010-ABF9989, ABF00010-ABF99898, ABF00010-ABF998989, ABF00010-ABF99898, ABF00010-ABF998989, ABF00010-ABF998989, ABF00010-ABF99989, ABF00010-ABF99989, ABF00010-ABF99989, ABF00010-A
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        Sequence 12 BP; 6 A; 2 C; 0 G; 4 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
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Pred. No.
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Query Match

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Score 11;

DB 1; Length 12;

RESULT 119
ABH83435
ID ABH834
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AC ABH834

ABH83435 standard; DNA; 12

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RESULT 118
ABH88751/c
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Best Local Similarity
Matches 11; Conserv
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                                                                                                                                                          This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989, ABH00010-ABF9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                    Set of oligonucleotides, useful for diagnosis and designed to detect single-nucleotide polymorphisms methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Oligonucleotide primer SEQ ID NO 288744 for detecting SNP TSC0013654.
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                                                                                                                Sequence 12
                                                                                                                                                                                                                                                                                                                                          Claim 1; SEQ ID NO 288744; 29pp + Sequence Listing; German
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12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EPIGENOMICS
                           GTATAAGGTGA 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Piepenbrock C,
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GTATAAGGTGA
                                                          Conservative
                                                                                                                  BP; 4 A; 4 C; 0 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
N
                                                                        100.0%;
                                                                     8.4%; Score 11;
100.0%; Pred. No.
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); Mismatches 0;
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1.3e+02;
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RESULT 120
ABI71223/c
ID ABI712
XX
AC ABI712
XY
AC ABI712
XX
DT 22-FEB
XX
Oligon
XX
SNP; B
KW SNP; B
KW Peptid
KW Centra
XX
COS Homo &
XX
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XX
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Best Local S
Matches 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
                                                                                                                                  Oligonucleotide primer SEQ ID NO 371196 for detecting
                  WO200177384-A2
                                             Homo sapiens.
                                                                         central nervous
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                                                                                                                                                                                             ABI71223;
                                                                                                                                                                                                                         ABI71223 standard;
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                                                                                                                                                                                                                                                                                                                                                           Conservative
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                                                                         gastrointestinal; respiratory;
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                                                                                                                                   SNP TSC0058640.
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immune; metabolic
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RESULT 121
ABI70151/c
ID ABI701
AC ABI701
XX ABI701
XX SNP; B
XX SNP; B
XX Gentra
XX Sentra
XX Gentra
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Matches 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                     WPI; 2001-657177/75.
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                                                                                                                                                                                                                    07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                       06-APR-2001; 2001WO-IB000713.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        central nervous system; gastrointestinal; respiratory;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 12 BP; 5 A; 0 C; 3 G; 4 T; 0 U; 0 Other;
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                                                                                                          Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTATCTAAAC
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hes 0;
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of oligonucleotides,

useful for diagnosis and cell typing,

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RESULT 122
AB130589
ID AB1305
XX AB1305
XX AB1305
XX AB1305
XX Oligon
XX SNP; & Centra
XX SNP; & KW Peptid
KW Centra
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Matches 11
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                                                                                         This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory,
                                                                                                                                                                                                                                                                                                                                              Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosin methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic
   range of diseases including immune system, gastrointestinal, respirat central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH82073
                                                                                                                                                                                                                                                                                     Claim 1; SEQ ID NO 330562; 29pp + Sequence Listing; German
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-657177/75
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Pred. No. 1.3e+
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metabolic
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Similarity

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BP; 5 A; 2 C; 0 G; 5 T; 0 U; 0 Other;

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RESULT 123
ABI39973
ID ABI399
XX ABI399
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XX PEB
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XX SNP; M PEPTION
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                                                 This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC9989, ABF00010-ABC9989, ABH00010-ABH99989 and ABI00010-ABH2073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Oligonucleotide primer SEQ ID NO 339946 for detecting SNP TSC0007645.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12
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1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 12
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RESULT 124
ABH83015
ID ARH830
XX ABH830
XX ABH830
XX ABH830
XX ABH830
XX ABH830
XX SNP; E
KW SNP; E
KW Peptid
XX SNP; E
KW Centra
XX SNP; E
KW Centra
XX Homo E
XX Homo
AFT HO
RESULT 125
ABH86779/c
ID ABH867
XX
AC ABH867
XX
AC ABH867
XX
DC 22-FEB
XX
DE Oligon
XX
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Best Local S
Matches 11
                                   Oligonucleotide primer SEQ ID NO
                                                                                                                                                                                                                       ABH86779 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABE9989, ABH00010-ABH99989 and ABF00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                22-FEB-2002
                                                                                                                                                             ABH86779;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 12 BP; 6 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; SEQ ID NO 283008; 29pp + Sequence Listing; German.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABH83015;
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                                                                                                (first entry)
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                                                                                                                                                                                                                       DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8.4%; but
100.0%; Pr
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 11;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                   286772 for detecting SNP TSC0012815
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Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                     Claim 1; SEQ ID NO 286772; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                  WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                             07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                 06-APR-2001; 2001WO-IB000713.
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                                                                                                                                                                                                                                                          (EPIG-)
                                                                                                                                                                                                                                                          EPIGENOMICS
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                                                                                                                                                                                                                                       Berlin
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Sequence 12 BP; 4 A; 0 C; 2 G; 6 T; 0 U; 0 Other; ftp.wipo.int/pub/published_pct_sequences

밁 Ş Query Match Best Local & Matches Local Similarity 11 72 TAAATTATACC 82 11; TAAATTATACC 1 Conservative 8.4%; Score 11; DB 1; 1 100.0%; Pred. No. 1.3e+02 0 Mismatches Length 12 Indels <u>.</u> Gaps 0

ABC69069 ABC69069 standard; DNA; 13 В₽

Oligonucleotide SEQ ID NO 69086 for detecting SNP TSC0017981 21-FEB-2002

(first entry)

RESULT 126
ABC69069
ID ABC690
XX ABC690
XX ABC690
XX OADC690
XX SNP; BY
KW SPPtid
KW PEPTid
KW Centra
XX Centra
XX Homo g
XX H SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; peptide nucleic acid; cytosine methylation; cardiovascular; primer; central nervous system; gastrointestinal; respiratory; immune; metal 07-APR-2000; 2000DE-01019173. 06-APR-2001; 2001WO-IB000713. 18-OCT-2001 WO200177384-A2

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RESULT 127
ABF05684/c
ID ABF056
XX ABF056
XX ABF056
XX Oligon
XX Oligon
XX SNP, B
KW SNP, B
KW Centra
XX Homo B
XX H
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                    Set of oligonucleotides, useful for diagnosis and cell designed to detect single-nucleotide polymorphisms and methylation status.
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                                                                                                                                                                                                                                                                 Olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Oligonucleotide SEQ ID NO 105681 for detecting SNP TSC0026488.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABP05684;
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                                                                                                                                                                                                                                                                                                                                                                                07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                                                                                                                                                          06-APR-2001; 2001WO-IB000713
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                                                                                                                                                                                                                                                                                                                          (EPIG-)
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L1; Conservative
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                                                                                                                     cytosine
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                                                                                    range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The coligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABF00010-ABF99989, ABF00010-ABF99989, The detection of the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                         This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a
Sequence 13 BP; 6 A; 0 C; 2 G; 5 T; 0 U; 0 Other;
                                                       ftp.wipo.int/pub/published_pct_sequences
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Query Match
Best Local Similarity
Matches 11; Conserv
                   72
12 TAAATTATACC 2
                                        11; Conservative
                  TAAATTATACC 82
                                                 8.4%; Score 11;
100.0%; Pred. No.
                                        0
                                         Mismatches
                                                  DB 1; L
1.3e+02;
                                         ..
                                                            Length 13
                                         Indels
                                        0
                                        Gaps
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RESULT 128
ABC87292
                                                                                ABC87292 standard; DNA; 13
Oligonucleotide
                           21-FEB-2002
                                                      ABC87292;
                           (first entry)
SEQ
ID NO 87309
for detecting SNP TSC0021951
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic

Homo WO200177384-A2. sapiens.

07-APR-2000; 2000DE-01019173. 18-OCT-2001 06-APR-2001; 2001WO-IB000713.

01ek designed to WPI; 2001-657177/75 (EPIG-) of oligonucleotides, Þ Piepenbrock C, onucleotides, useful for diagnosis and cell typing, detect single-nucleotide polymorphisms and cytosine Berlin

EPIGENOMICS

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Claim 1; SEQ ID NO 87309; 29pp + Sequence Listing; German methylation status.

ftp.wipo.int/pub/published_pct_sequences

Claim 1; SEQ

ID NO 105681; 29pp + Sequence Listing; German

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                                                                                                               RESULT 129
ABH22531/c
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                                                                                                                                                    acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cyrosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABB99989, ABH00010-ABB9989 and ABI00010-BB182073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                          Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                              Sequence 13 BP; 4 A; 4 C; 0 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                 Claim 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic
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                                                                    Local Similarity
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                                                                                                                                                                                                                                                                                    invention describes novel oligonucleotide primers or peptide nucleic (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
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AGTATAAGGTG 3
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                                                       Conservative
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                                                                    Score 11; DB 1; L
Pred. No. 1.3e+02;
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Pred. No. 1.3e+02;
0; Mismatches 0;
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RESULT 130 ABF16585/c

Homo sapiens

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RESULT 131
ABF17819
ID ABF178
XX
AC ABF178
XX
AC ABF178
XX
Oligon
XX
Oligon
XX
SNP; s
KW SNP; s
KW peptid
KW centra
XX
OS Homo s
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Best Local S
Matches 11
                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; peptide nucleic acid; cytosine methylation; cardiovascular; primer; central nervous system; gastrointestinal; respiratory; immune; metal
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                                                                Oligonucleotide SEQ ID NO 117816 for detecting SNP TSC0029452
                                                                                                            ABF17819
                                                                                                                                  ABF17819 standard; DNA; 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; SEQ ID NO 116582; 29pp + Sequence Listing; German
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                                                                                      21-FEB-2002
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                                                                                                                                                                                                              GAGTATAAGGT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Piepenbrock C,
                                                                                                                                                                                                                                  8.4%; Score 11; DB ilarity 100.0%; Pred. No. 1. Conservative 0; Mismatches
                                                                                                                                                                                                                                                                             BP; 3 A; 6 C; 0 G; 4 T; 0 U; 0 Other;
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                                                                                      (first entry)
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hes 0;
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RESULT 132
ABF23104/c
ID ABF231
XX ABF231
XX ABF231
XX SNP; G
KW SNP; G
KW Peptid
KW Centra
XX Homo E
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Matches 11
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                           01ek A,
                                                                                                                                                                                                                                                                                            WO200177384-A2
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                           Piepenbrock C,
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                                                                                                                                    2000DE-01019173
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                                                                                                                                                                                                                                                                                                                                                                                                  gastrointestinal;
                           Berlin K;
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Pred. No. 1.3e
1; Mismatches
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RESULT 133
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AC ABF
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Matches 11
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This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a

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RESULT 134
ABC69068/c
ID ABC690
XX ABC690
XX ABC690
XX SNP; B
CO Oligon
XX SNP; B
KW Peptid
XW Centra
XX WO2001
XX Gentra
XX CEPIG-
PI Olek A
XX WPI; 2
XX WPI; 2
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XX WPI; 2
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CC Tange
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Matches 11
                                                                                                                                -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABIUVVIV-PARE represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, by was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                        This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99889, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
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                                                                                                           Sequence 13 BP; 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Oligonucleotide SEQ ID NO 69085 for detecting SNP TSC0017981.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 69085; 29pp + Sequence Listing; German.
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                               Local Similarity
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Similarity 100.0%; P
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Pred. No.
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ABF57605 standard;

DNA; 13

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RESULT 135
ABP46246/C
ID ABP462
XX ABP462
XX ABP462
XX SNP; R
XX SNP; R
XX Peptid
XX SNP; R
XX PO2001
XX WO2001
XX Cantor
PT Olek A
XX WPI; 2
XX WPI; 2
XX WPI; 2
XX WPI; 2
XX Set of
PT design
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XX Coligor
CC Tange
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RESULT 136
ABF57605
ID ABF576
XX
AC ABF576
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AC ABF576
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Best Local Similarity
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Pred. No. 1.3e+02;
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RESULT 137
ABH10656
ID ABH106
XX ABH106
XX ABH106
XX ABH106
XX 22-FEB
XX 22-FEB
XX SNP; 8
KW Peptid
KW centra
XX SNB; 8
KW Peptid
XW Centra
XX SNB; 8
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                                                                                                                                                                                                                                SNP; single nucleotide polymorphism; human; diagnosis; PNA; peptide nucleic acid; cytosine methylation; cardiovascular;
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                                                                                                                                                                                                     system; gastrointestinal; respiratory;
                                                                                                                                                                                                                                                                                                                    SEQ ID NO 210633 for detecting SNP TSC0051423
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RESULT 138
ABH37264/c
ID ABH372
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Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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RESULT 139
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                            acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence
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form part of the
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                                                                                                                                                                                                                                                                                                                                                                                   This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for disgnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99889, ABF00010-ABF99989, ABH00010-ABF99989, ABH00010-ABF99989, ABH00010-ABF99989, ABH00010-ABF9989, ABH00010-ABF9989, ABH00010-ABF9989, ABH00010-ABF9989, ABH00010-ABF9989, ABH00010-ABF9989, ABH00010-ABF9989, ABH00110-ABF9989, ABH00110-ABF99989, ABH00110-ABF99989, ABH00110-ABF99989, ABH0011
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              methylation status.
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                                                                                                                                                                                                                                                                                     BP; 6 A; 3 C; 0 G; 4 T; 0 U; 0 Other;
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Pred. No.
                                                                                                                                                                                Score 11; DB 1;
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RESULT 141
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XX CEPIG-
XX WPI; 2
XX Claim

RESULT 142
ABH36296/c
ID ABH362
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; peptide nucleic acid; cytosine methylation; cardiovascular;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Set of oligonucleotides, useful for diagnosis and cell designed to detect single-nucleotide polymorphisms and methylation status.
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                                                                                      Oligonucleotide
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                                                                                   SEQ ID NO 236273 for detecting SNP TSC0008120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                                                                            Oligonucleotide SEQ ID NO 164307 for detecting SNP TSC0041255
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                               07-APR-2000; 2000DE-01019173.
                                                            06-APR-2001; 2001WO-IB000713.
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                                                                                                                        WO200177384-A2
                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                  peptide nucleic
central nervous
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                                                                                                                                                                               single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; ide nucleic acid; cytosine methylation; cardiovascular; primer; ss; ral nervous system; gastrointestinal; respiratory; immune; metabolic
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                                                                                      Claim 1; SEQ ID NO 164312; 29pp + Sequence Listing; German
                                                                                                                                             designed to detect methylation status.
                                                                                                                                                                     Set of oligonucleotides, designed to detect single
                                                                                                                                                                                                                                                                                                                Olek A,
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                                                                                                                                                                       useful for diagnosis and cell typing, e-nucleotide polymorphisms and cytosine
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1.3e+02;
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invention describes

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novel oligonucleotide primers or peptide nucleic detecting single nucleotide polymorphisms (SNP)

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                                                This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010—ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         methylation status
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Pred. No.
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DB 1; Length 13;

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RESULT 146
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ID ABH370
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                     ABH37265 standard; DNA; 13
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ide nucleic acid; cytosine methylation; cardiovascular;
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Similarity 100.0%; Pred. No. 1.:
11; Conservative 0; Mismatches
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l; Mismatches
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RESULT 148
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                                                            SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic
                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 13
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                                                                                                                            Oligonucleotide SEQ ID NO 123807 for
                                                                                                                                                                                              ABF23810
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                                                                                                                                                              21-FEB-2002
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                                                                                                                                                                                                                            standard;
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                                                                                                                                                                                                                                                                                                                                                                          Conservative
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Pred. No. 1.3e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
                     WPI; 2001-657177/75
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Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
             Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;
                                                                                                                Claim 1; SEQ ID NO 219247; 29pp + Sequence Listing; German.
8.4%;
DB 1;
Length 13;
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Oligonucleotide central nervous 21-FEB-2002 single nucleotide polymorphism; human; diagnosis; PNA; ide nucleic acid; cytosine methylation; cardiovascular; (first SEQ system; ij entry NO 136565 for detecting SNP TSC0034129 polymorphism; human; diagnosis; PNA; cancer; ytosine methylation; cardiovascular; primer; gastrointestinal; respiratory; immune; metal metabolic.

ABF36568

ABF36568 standard;

DNA;

13

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150 68/c

Homo sapiens

WO200177384-A2

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG

Olek Piepenbrock C, Berlin ×

WPI; 2001-657177/75

Set of oligonucleotides, useful for diagnosis and cell designed to detect single-nucleotide polymorphisms and methylation status. cytosine typing,

Claim 1; SEQ ID NO 136565; 29pp + Sequence Listing; German.

RESULT 15
ABF3568/
ID ABF3
XX ABF3
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XX Pept
XX Olig
XX SNP;
KW Pept
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XX WO20
XX WO21
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XX O1-J
XX WPI;
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XX WPI;
XX Clad
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The for cell type ABC00010

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CNS; 88;

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RESULT 151
ABF36569
Query Match
Best Local Similarity
Matches 11; Conserv
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                                                                                                                                          This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleitide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; SEQ ID NO 136566; 29pp + Sequence Listing; German.
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                                                                                                  Sequence 13 BP; 5 A; 2 C; 0 G; 6 T; 0 U; 0 Other;
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ATCTATCTAAA 40

Oligonucleotide SEQ ID NO 44394 for detecting SNP TSC0013032.

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RESULT 152
ABH22530
ID ABH2255
XX ABH225
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XX SNP; s
KW peptid
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RESULT 153
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cardiovascular; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                immune;
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RESULT 154
ABC88333/c
ID ABC883
XX ABC883
AC ABC883
AC ABC883
XX 21-FEE
XX 2NP; E
KW Peptic
KW Peptic
KW Centra
XX Centra
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.
                   06-APR-2001; 2001WO-IB000713.
                                                                                WO200177384-A2
                                                                                                                                                                                                           Oligonucleotide
                                                                                                                                                                                                                                                                                                    ABC88333 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                         21-FEB-2002
                                                                                                                                                                                                                                                                       ABC88333;
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                                                 18-OCT-2001.
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                                                                                                                                           single nucleotide polymorphism; human; diagnosis; PNA; ide nucleic acid; cytosine methylation; cardiovascular; ral nervous system; gastrointestinal; respiratory; immun
                                                                                                                                                                                                                                                                                                                                                                                                               73 AAATTATACCA 83
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                      DNA;
                                                                                                                                                                                                        ID NO 88350 for detecting SNP TSC0022204.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8.4%;
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                                                                                                                                                                                                                                                                                                      ВP
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Pred. No.
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                                                                                 Query Match
Best Local 8
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                                                                                                                                                                                                                                                                                                                                                                                                                                  Set of oligonucleotides, useful for diagnosis and cell designed to detect single-nucleotide polymorphisms and methylation status.
                                                                                                                                    Sequence 13
                                                                                                                                                                     ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; SEQ ID NO 88350; 29pp + Sequence Listing;
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                         20 TATACTTGTAATC 32
                                                                                 Similarity
 TATATTTGTAATY 1
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                                                                 8.4%;
ilarity 84.6%;
Conservative
                                                                                                                                      BP; 7 A; 1 C; 0 G; 4 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Berlin
                                                                   1;
                                                                                   Score 11; DB 1;
Pred. No. 1.3e+02;
                                                                      Mismatches
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                                                                                                    Length 13;
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                                                                     Gaps
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RESULT 155
ABH17450
ID ABH174
XX ABH174
XX ABH174
XX ABH174
XX SNP;
BY OLIGON
XX COLIGN
PT GESIGT
PT GESIGT
PT GESIGT
PT GESIGT
PT Set of
                                                                                                                                                                                                                                                                                                                                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                      Oligonucleotide SEQ ID NO 217427 for detecting SNP TSC0052875
                                                                                                                                                                                                                                                                                                                                                                                                                                    22-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABH17450;
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                                                                                                                                                                                                                                                                                                                                                                                                                                    (first
                                                                                                                                                                                                                                                                                                                                                                                                                                    entry)
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Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.

2001-657177/75.

07-APR-2000; 2000DE-01019173

EPIGENOMICS

Piepenbrock C,

Berlin

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06-APR-2001; 2001WO-IB000713.

18-OCT-2001 WO200177384-A2

Claim 1; SEQ ID NO 217427;

29pp +

Sequence Listing;

x6666666666688**x**

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RESULT 156
ABP69633/c
ID ABP696
XX A
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                                  This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010—ABC99989, ABF00010—ABF9989, ABF00010—ABF99989, ABF00010—ABF99989, ABF00010—ABF99989, ABF00010—ABF99989, ABF00010—A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Set of oligonuclectides, useful for diagnosis and cell typing, designed to detect single-nuclectide polymorphisms and cytosin methylation status.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                central nervous
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; SEQ ID NO 169629; 29pp + Sequence Listing; German
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Pred. No. 1.3e+02;
1; Mismatches 1;
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                                                                                                                              This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC9989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                                                                                                                                                                                          Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Oligonucleotide SEQ ID NO 202986 for detecting SNP TSC0049850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABH03009;
                                                                                                       Sequence 13
                                                                                                                                                                                                                                                                                                               Claim 1; SEQ ID NO 202986; 29pp + Sequence Listing; German
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 RAATTATACCATC 13
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                                                                                                         BP; 5
                                                    Conservative
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f; Pred. No. 1.3
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1.3e+02;
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RESULT 158

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ABF17818/c
ID ABF17818 standard; DNA; 13 BF
XX
AC ABF17818;
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DT 21-FEB-2002 (first entry)
DT 21-FEB-2003 (first entry)
DT 21-FEB-2001 (first entry)
DT 2001-7384-A2.
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RESULT 159
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                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                        Oligonucleotide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; SEQ ID NO 117815; 29pp + Sequence Listing; German
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-APR-2000; 2000DE-01019173
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                                                                                                                                                     SEQ ID NO 146244
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Pred. No. 1.3e+02;
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                                                                                                                                                  for detecting SNP TSC0036845
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RESULT 160
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                                                                                                                                                                                                                                                                                Oligonucleotide SEQ ID NO 68545 for detecting SNP TSC0017868.
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                              (EPIG-)
                                                             07-APR-2000; 2000DE-01019173
                                                                                          06-APR-2001; 2001WO-IB000713.
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                                                                                                                                                                                     Homo sapiens.
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Berlin K;
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RESULT 161
ABC2930
AC ABC293
AC ABC2
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Matches 11
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acid (PNA) oligomers for detecting single nucleotide polymorphisms and cytosine methylation status in chemically pretreated genomic Di oligonucleotides are used for diagnosis and/or prognosis of cancer
                                                                                                                                                                                                     methylation status.
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                                                        This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
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                                                                                                                              range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NoTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a
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Pred. No. 1.3e+02;
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Query Match Best Local Similarity

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                                         ABF64314;
                                                                                                                ABF64314 standard;
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                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                        Oligonucleotide SEQ ID NO 29317 for detecting SNP TSC0008650.
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                                                 Homo sapiens.
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                                                                                                                                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; peptide nucleic acid; cytosine methylation; cardiovascular; central nervous system; gastrointestinal; respiratory; immun
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Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosin
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                       designed to methylation
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RESULT 168
ABF29060/c
ID ABF290
XX ABF290
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XX SNP; g
KW Peptid
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XX HOMO g
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Best Local Similarity
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                                                                                                                                                                                                                                                                                     This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this pattent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                       Sequence 13 BP; 6 A; 0 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; SEQ ID NO 129057; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          methylation status.
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                                                                                                                      Conservative
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Pred. No. 1.3e+02;
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RESULT 169
RESULT 169
RAPF39159
ID ABP391
XX ABP391
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XX Oligon
XX SNP; a
KW peptid
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RESULT 170
ABH17451/c
ID ABH174
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SNP; 8
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                                                                             Oligonucleotide SEQ ID NO 217428 for detecting SNP TSC0052875.
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SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer;
                                                                                                                                                                                                                                                                                                                                      ABH17451 standard; DNA; 13
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ilarity 100.0%; Pred. No. 1.3e+02;
Conservative 0; Mismatches 0;
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RESULT 171
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                                                                                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                Oligonucleotide SEQ ID NO 219248 for detecting SNP TSC0053308
                 07-APR-2000; 2000DE-01019173
                                               06-APR-2001; 2001WO-IB000713
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                                                                                                                  Set of oligonucleotides, useful for diagnosis and designed to detect single-nucleotide polymorphisms methylation status.
                                                                                                                                                                                                                                                                                                   Olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic
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                                                          Claim 1; SEQ ID NO 169630; 29pp + Sequence Listing; German
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This invention describes novel oligonuclectide primers or peptide nucleic

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                            This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010—ABC99989, ABF00010—ABF9989, ABF9989, ABF99989, ABF9989, ABF99989, ABF99989, ABF99989, ABF999999, ABF999999999, ABF
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5. 1.3e+02;
0;
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Sequence 13 BP; 4 A; 4 C; 0 G; 4 T; 0 U; 1 Other;

RESULT 175 ABH37000/c ID ABH370

ABH37000 standard; DNA; 13

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ABF57604/c
ID ABF576
XX ABF576
XX Oligon
XX Oligon
XX SNP; 8
KW peptid
KW peptid
KW centra
OS Homo 8
XX Homo 8
PN WO2001
XX O1-APR
XX O1
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Matches 11
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Best Local &
                                                                                                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                    Sequence 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              methylation status
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21-FEB-2002
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                                                                                                                                                                                                                                  ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                 Similarity
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                                       AAATTATACCA 83
AAATTATACCA 3
                                                                                                                                                                                      BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
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                                                                                                                 8.4%;
100.0%;
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Pred. No.
                                                                                                                 Score 11;
Pred. No.
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                                                                                                Mismatches
                                                                                                                 DB 1; L
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1.3e+02;
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RESULT 176
ABPO56
ID ABPO56
AC ABPO56
AC ABPO56
XX 21-FEB
XX 21-FEB
XX 21-FEB
XX 2011gon
KW SNP; 8
KW SNP; 8
KW PEPLLG
XX YX Homo 8
XX
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for disgnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; peptide nucleic acid; cytosine methylation; cardiovascular; primer; central nervous system; gastrointestinal; respiratory; immune; metal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                Oligonucleotide SEQ ID NO 105682 for detecting SNP TSC0026488.
                                                                                                                                                                                   ABF05685;
                                                                                                                                                                                                                  ABF05685 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 13 BP; 5 A; 0 C; 1 G; 6 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; SEQ ID NO 236977; 29pp + Sequence Listing; German.
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                                                                                                                                                   21-FEB-2002
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                  Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                invention describes novel oligonucleotide primers or peptide nucleic
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                                                                                                                                                                                                                                                                                                                                                                              similarity 84.6%;
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                                                                                                                                                                                                                                                                                                                                                                  Conservative
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                                                                                                                                                   (first entry)
                                                                                                                                                                                                                  DNA; 13
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                                                                                                                                                                                                                                                                                                                                                                                 Score 11; DB 1;
Pred. No. 1.3e+02
                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                 1.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                               Length 13;
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metabolic
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RESULT 177
ABC87293/c
ID ABC872
XX ABC872
XX ABC872
XX SNP; B
XX SNP; B
KW Peptid
KW centra
XX Homo B
XX W02001
XX W02001
XX W02001
XX O1-APF
XX O7-APF
XX O1ek ;
PI O1ek ;
XX WPI; ;
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Matches 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine
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   WPI; 2001-657177/75
                      Olek A,
                                                                                                                                                                         SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
                                                                                                                                                                                                     Oligonucleotide SEQ ID NO 87310 for detecting SNP TSC0021951.
                                                                                                                                                                                                                                              ABC87293;
                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 13 BP; 5 A; 2 C; 0 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        methylation status
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                                                                                                                                                              peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                           21-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                  ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 105682; 29pp + Sequence Listing;
                                                              07-APR-2000; 2000DE-01019173
                                                                                06-APR-2001; 2001WO-IB000713.
                                                                                                      18-OCT-2001.
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                                          (EPIG-)
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                                                                                                                                           sapiens.
                                                                                                                                                                                                                                                                                                                                      72 TAAATTATACC 82
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                                           EPIGENOMICS
                                                                                                                                                                                                                                                                                                                                                                     Similarity
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                      Piepenbrock C,
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                                                                                                                                                                                                                          entry.
                                                                                                                                                                                                                                                                                                                   12
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100.0%; Pred. No.
                       Berlin
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                       7,
                                                                                                                                                                                                                                                                                                                                                            Mismatches
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1.3e+02;
thes 0;
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RESULT 178
ABF16584
ID ABF165
XX Oligon
XX SNP; BE
XX Peptid
XX Centra
XX Homo B
XX Homo B
XX HOMO B
XX HOMO B
XX O1-APF
XX O1
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Matches 11
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The
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                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 116581; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                          methylation status.
                                                                                                                                                                                                                                                                                                                                         Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-APR-2000; 2000DE-01019173
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                                                                           This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cyrcosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABF32073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
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                                   22-FEB-2002
                                                                                                ABF69720;
                                                                                                                                                           ABF69720 standard; DNA; 13 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-FEB-2002
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                                                                                                                                                                                                                                                                                                                                                                             73 AAATTATACCA 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCTATCTAAAC 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCTATCTAAAC 41
                                                                                                                                                                                                                                                                                                                   AAATTATACCA 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
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Pred. No.
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1.3e+02;
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RESULT 182
ABH36297
ID ABH362
XX ABH362
XX Oligor
XX Oligor
XX SNP; &
KW SNP; &
KW peptic
KW peptic
KW peptic
KW peptic
XX SNB; &
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XX Homo &
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Best Local Similarity
Matches 11; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosline methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABF99989 and ABI00010-ABI32073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
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                                                                                                                                                                                                                                                                                                SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Set of oligonucleotides, useful for diagnosis and cell typing, designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                           Oligonucleotide SEQ ID NO 236274 for detecting SNP TSC0008120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABH36297 standard; DNA; 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 13 BP; 4 A; 0 C; 4 G; 4 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-APR-2000; 2000DE-01019173.
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                                                                                                                                                                                                  Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1;
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                                                                                                                                                                                                                                                                  central nervous system; gastrointestinal;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    70 GCTAAATTATACC 82
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Pred. No. 1.3e+02
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06-APR-2001; 2001WO-IB000713.

18-OCT-2001

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RESULT 183
ABF64311/c
ID ABF643
XX ABF643
XX ABF643
XX SNP; g
EX Oligon
XX SNP; g
KW peptid
KW centra
XX Homo s
XX H
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Best Local S
Matches 11
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                                      Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
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                                                                                                                                                                                             WPI; 2001-657177/75
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-APR-2000; 2000DE-01019173.
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                                                                                                                                                                                                                                                                                                                                            (EPIG-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                46 AACCTCTCTAGTA 58
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Similarity 84.6%;
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                                                                                                                                                                                                                                                                  Berlin K;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
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Matches 11
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                                                                                                                                                                                                                         Sequence 13 BP; 4 A; 5 C; 0 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; SEQ ID NO 164308; 29pp + Sequence Listing;
                                                              13
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                                                                                                   5 GAGTATAAGGT 15
                                                                                                                                                                 Similarity
                                                              GAGTATAAGGT 3
                                                                                                                                                Conservative
                                                                                                                                                               8.4%; Score 11;
100.0%; Pred. No.
    9, 2004, 17:22:30
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1.3e+02;
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Post-processing: Minimum Match 0%
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Listing first 27 summaries
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re greater than or equal to the score of the result being printed,
is derived by analysis of the total score distribution.
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131
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US-08-443-957-39
US-08-443-957-6
US-08-43-957-6
US-08-319-492B-449
US-09-164-249B-16
US-08-182-968A-491
US-09-064-156A-491
US-09-081-646-679
US-08-334-847-90
US-08-334-847-91
US-08-334-847-91
US-08-334-847-91
US-08-38-864B-793
US-08-38-684B-793
US-08-38-684B-793
US-08-38-684B-793
US-08-38-684B-793
US-09-081-646-662
US-08-38-073-793
US-08-38-073-793
US-08-38-073-793
US-08-1646-662
US-08-38-073-793
US-08-38-073-79
                                                     US-08-520-194-6
US-08-259-148A-54
US-07-876-941A-70
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Sequence 29, Appl
Sequence 37, Appli
Sequence 4, Appli
Sequence 16, Appli
Sequence 16, Appli
Sequence 491, Appl
Sequence 491, Appl
Sequence 677, Appl
Sequence 678, Appl
Sequence 91, Appli
Sequence 91, Appli
Sequence 793, Appli
Sequence 793, Appli
Sequence 794, Appli
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Patent No.
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CITY: Eng
STATE: Co
COUNTRY:
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RESULT 1

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Searched:

Scoring table: Sequence: Perfect score:

Database

Pred. No.

; OTHER INFORMATION: Aptamer US-09-857-063-1 US-09-857-063-1 PRIOR APPLICATION NUMBER: PCT/EP00/01595
PRIOR FILING DATE: 2000-02-25
PRIOR APPLICATION NUMBER: DE 199 09 156.0
PRIOR FILING DATE: 1999-03-02
NUMBER OF SEQ ID NOS: 27
SOFTWARE: PatentIn version 3.1
SEQ ID NO 1 GENERAL INFORMATION: Sequence 1, Application US/09857063 Patent No. 6579681 Query Match
Best Local Similarity
Matches 24; Conserv APPLICANT: Luhrmann, Reinhard
APPLICANT: Achsel, Tilmann
APPLICANT: Vornlocher, Hans-Peter
TITLE OF INVENTION: Test System for Detecting a Splicing Reaction and Use Thereof
FILE REFERENCE: 199at.01.us (8602*34)
CURRENT APPLICATION NUMBER: US/09/857,063
CURRENT FILING DATE: 2001-08-29 CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/134,028
FILING DATE: 10 OCTOBER 1993
APPLICATION NUMBER: 07/714,131
FILING DATE: 10-JUNE-1991
PRIOR APPLICATION DATA:
07/516,428 APPLICANT: Huls, APPLICANT: Baue GENERAL INFORMATION: COMPUTER: IBM
OPERATING SYSTEM: MS-DOS
SOFTWARE: WordPerfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/4
FILING DATE: TYPE: RNA
ORGANISM: Artificial Sequence COMPUTER READABLE FORM: MEDIUM TYPE: Diskett TITLE OF INVENTION: HIGH-AFFINITY NUCLEIC ACID LIGANDS THAT TITLE OF INVENTION: DISCRIMINATE BETWEEN THEOPHYLLINE AND TITLE OF INVENTION: CAFFEINE NUMBER OF SEQUENCES: 37 CORRESPONDENCE ADDRESS APPLICATION NUMBER: 07/53 FILING DATE: 11-JUNE-1990 ADDRESSEE: 73 AAATTATACCAGCATCGTCTTGATGCCCTTGGCAG 80111 SSEE: Swanson & Bratschun, T: 8400 E. Prentice Avenue, Englewood AAGUGAUACCAGCAUCGUCUUGAUGCCCUUGGCAG Colorado Application US/08443957 Simandi, Claus Bauer, Bettina Robert Jenison Larry Gold USA Conservative Barry Polisky Christoph Diskette, 24.3%; 07/536,428 US/08/443,957 3.5 9 Score 31.8; Pred. No. 0 inch, Mismatches L.L.C. s, Suite 800 Kb storage 200 DΒ 35 2; Length 40; Indels 0 Gaps

ATTORNEY/AGENT INFORMATION:

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TELECOMMUNICATION INFORMATION:
TELEPHONE: (303) 793-333
TELEPEAX: (303) 793-3433
INFORMATION FOR SEQ ID NO: 37:
SEQUENCE CHARACTERRISTICS:
LENGTH: 38 base pairs
TYPE: nucleic acid
STRANDEDNESS: Single
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MEDIUM TYPE: Diskette, 3.5 inch, 80
COMPUTER: IBM
OPERATING SYSTEM: MS-DOS
SOFTWARE: WordPerfect 5.1
CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/08/443,957
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION UNWBER: 08/134,028
PILING DATE: 10 OCTOBER 1993
APPLICATION NUWBER: 07/714,131
PILING DATE: 10 JUNE-1991
PRIOR APPLICATION DATA:
APPLICATION NUWBER: 07/536,428
PILING DATE: 11-JUNE-1990
ATTORNEY/AGENT INFORMATION:
NAME: BATTY J. SWANBOR
PRIOR PRIOR DATE: 32 216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: (303) 793-3433 INFORMATION FOR SEQ ID NO: :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Barry Polisky
APPLICANT: Robert Jenison
APPLICANT: Larry Gold
TITLE OF INVENTION: HIGH-AFFINITY NUCLEIC ACID LIGANDS THAT
TITLE OF INVENTION: DISCRIMINATE BETWEEN THEOPHYLLINE AND
TITLE OF INVENTION: CAFFEINE
NUMBER OF SEQUENCES: 37
CORRESPONDENCES: 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
LENGTH: 42 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET: BY COLORADO CITY: Englewood STATE: Colorado
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Barry J. Swanson
REGISTATION NUMBER: 33,215
REFERENCE/DOCKET NUMBER: NE:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (303) 793-3333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                 REGISTRATION NUMBER: 33,215
REFERENCE/DOCKET NUMBER: NEX11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: USA
ZIP: 80111
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8400 B. Prentice Avenue, Suite 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
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US-08-443-957-6
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                                                                                                                                                                                        TELEFAX: (303) 793-333;
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 40 base natural type.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 22; Conserv
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GENERAL INFORMATION:
                                                                     Matches
                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 6,
                                                                                                                                                                                                                                                                                                                             OPERATING SYSTEM: MS-DOS
SOFTWARE: WOXDPERFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/443,95
FILLING DATE:
CLASSIFICATION ATA:
CLASSIFICATION UNMBER: 08/134,028
APPLICATION NUMBER: 08/134,028
APPLICATION NUMBER: 07/714,131
FILLING DATE: 10 OCTOBER 1993
APPLICATION NUMBER: 07/714,131
PRIOR APPLICATION DATA: 07/536,428
APPLICATION NUMBER: 07/536,428
APPLICATION NUMBER: 07/536,428
APPLICATION NUMBER: 07/536,428
APPLICATION SWANBON:
NAME: BAITY J. SWANBON:
NAME: BAITY J. SWANBOR: 33,215
APPLICATION NUMBER: 33,215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: 67..
STREET: 67..
CITY: Englewood
CTATE: Colorado
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: Swanson & Bratschun, L.L.C.
STREET: 8400 E. Prentice Avenue, Suite
                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: NE
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: HIGH-AFFINITY NUCLEIC ACID LIGANDS THAT TITLE OF INVENTION: DISCRIMINATE BETWEEN THEOPHYLLINE AND TITLE OF INVENTION: CAFFEINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES:
                                                                                                                                                                      LENGTH: 40 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            76 TTATACCAGCATCGTCTTGATGCCCTTGGCAG 107
: |:|||||||:||:||:|||||:|||||
3 UGAUACCAGCAUCGUCUUGAUGCCCUUGGCAG 34
                    76 TTATACCAGCATCGTCTTGATGCCCTTGGCAG 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    80111
2 UGAUACCAGCAUCGUCUUGAUGCCCUUGGCAG 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Application US/08443957
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Robert Jenison
Larry Gold
                                                                     Conservative
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                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Diskette, 3.5 inch, 800 Kb storage
                                                                                  23.2%;
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                                                                                                                                                                                                                                                                                                                    NEX11
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                                                                     9; Mismatches
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Pred. No. 0.
                                                                                     Score 30.4; DB 1;
Pred. No. 0.42;
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                                                                                                    Length 40;
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RESULT 5 US-08-319-492B-449/c

Sequence 449, Application US/08319492B

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                 GENERAL INFORMATION:
APPLICANT: Chetverin, Alexander B.
APPLICANT: Kramer, Fred Russel
TITLE OF INVENTION: NOVEL OLIGONUCLEOTIDE ARRAYS AND THEIR USE FOR SORTING,
TITLE OF INVENTION: ISOLATING, SEQUENCING, AND MANIPULATING NUCLEIC ACIDS
FILE REFERENCE: 07763-004003
CURRENT APPLICATION NUMBER: US/09/164,249B
CURRENT FILING DATE: 1998-09-30
                                                                                                                                                              Sequence 16, Application US/09164249B Patent No. 6322971
                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/319,492B

FILING DATE: October 7, 1994

PRIOR APPLICATION DATA:

PRIOR APPLICATION DATA: including application
PRIOR APPLICATION DATA: described below:
APPLICATION NUMBER: 08/008,995

FILING DATE: January 19, 199

APPLICATION NUMBER: 07/989,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
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COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: (213) 489-1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Stinchcomb, Dan T.
TITLE OF INVENTION: RIBOZYME TREATMENT OF DISEASES
TITLE OF INVENTION: OR CONDITIONS RELATED TO LEVELS
TITLE OF INVENTION: OF IL-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Warburg, Richard REGISTRATION NUMBER: 32,3 REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM Compatible OPERATING SYSTEM: IBM P.O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRANDEDNESS:
TOPOLOGY: 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE:
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                                                                                                                                                                                                                                                                              15
                                                                                                                                                                                                                                                                                                                31 TCTATCTAAACGGG 44
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               U.S.A.
TION NUMBER: US 08/473,010
                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sullivan, Sean M. Draper, Kenneth G. McSwiggen, James
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Word Perfect 5.1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               single
                                                                                                                                                                                                                                                                                                                                                                  9.5%;
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Pred. No. 13;
0; Mismatches
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                                                                  US-08-182-968A-491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-182-968A-491/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 491, Application US/08182968A Patent No. 5610054 GENERAL INFORMATION:
Query Match 9.0
Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
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NUMBER OF SEQ ID NOS: 18
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                 TELEX: 67-3510
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 1995-06-07
PRIOR APPLICATION NUMBER: US 08/247,530
PRIOR FILING DATE: 1994-05-23
PRIOR APPLICATION NUMBER: US 07/838,607
                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/08/182,
FILLING DATE: 13-JANUARY-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/882,888
FILING DATE: 14-MAY-1992
ATTORNBY/AGENT INFORMATION:
NAME. WEACHING DICHARY-I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                         OPERATING SYSTEM: IBM P.C. SOFTWARE: Word Perfect 5.1 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
COMPUTER: IBM Compatible
                                                                                                                                                                                                                             NAME: Warburg, Richard J.
REGISTATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 20:
TELECOMMUNICATION INFORMATION:
                                                                                                                                              SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth
STREET: Suite 4700
                                                                               STRANDEDNESS: 811
TOPOLOGY: linear
                                                                                                                                                                                TELEPHONE: (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: Los Angeles
STATE: California
                                                                                                                               LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          76 TTATACCAGCAT 87
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                                                                                                                nucleic acid
                                                                                                                                                                                                               (213) 489-1600
               9.0%;
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METHOD AND REAGENT FOR INHIBITING HEPATITIS C VIRUS REPLICATION
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100.0%; Pi
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100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                              07/882,888
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Score 11.8; Di
Pred. No. 15;
0; Mismatches
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12;
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                                Length 15;
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104 GCAGATAAATGCCTA 118

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US-09-064-156A-491/c
; Sequence 491, Application US/09064156A
; Patent No. 6132966
; GENERAL INFORMATION: Kenneth G.
APPLICANT: Draper, Kenneth G.
TITLE OF INVENTION: METHOD AND REAGE:
INTLE OF INVENTION: INHIBITING HEPAT:
TITLE OF INVENTION: VIRUS REPLICATION;
                                                                                                                                                         RESULT 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 491, Applica Patent No. 5869253 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REGERENCE/DOCKET NUMBER: 223/227
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/08/774,3
FILING DATE: December 26, 1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/182,968
FILING DATE: January 13, 1994
APPLICATION NUMBER: 07/882,888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C.
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: Surce
STREET: Los Angeles
CITY: Los Angeles
CTATE: California
NUMBER OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: METHOD AND REAGENTITLE OF INVENTION: INHIBITING HEPATITITLE OF INVENTION: VIRUS REPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: May 14, 1992 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: (41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                               STRANDEDNESS:
                                                                                                                                                                                                                                                                                            Local
                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY:
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                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH:
                                                                                                                                                                                                                                  104 GCAGATAAATGCCTA 118
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                                                                                                                                                                                                                                                                            13;
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                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                   nucleic acid
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633 West Fifth Street
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                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                               single
                Kenneth G.

METHOD AND REAGENT FOR INHIBITING HEPATITIS C VIRUS REPLICATION
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METHOD AND REAGENT FOR
INHIBITING HEPATITIS C
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Pred. No. 15;
0; Mismatches
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                                                                                                                                                                                                                                                                                                              DB 1; Length 15;
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TITLE OF INVENTION: Gene Expression Profiles in No. 63:
FILE OF INVENTION: Cancer Cells
FILE REFERENCE: 01107.74664
CURRENT APPLICATION UNMBER: US/09/081,646
CURRENT FILING DATE: 1998-05-20
EARLIER APPLICATION NUMBER: 60/047,352
EARLIER FILING DATE: 1997-05-21
INVMBER OF SEQ ID NOS: 871
SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 677
; ORGANISM: Homo sapiens US-09-081-646-677
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                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                            Sequence 677, Application US/09081646 Patent No. 6333152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: December 26, 1996
APPLICATION NUMBER: 08/182,968
FILING DATE: January 13, 1994
APPLICATION NUMBER: 07/882,888
FILING DATE: May 14, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 234/083
                                                                                                                                                                                                                                                              APPLICANT: Kinzler, Kenneth
APPLICANT: Vogelstein, Bert
APPLICANT: Zhang, Lin
APPLICANT: Zhou, Wei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO:
                                                     LENGTH: 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/00
FILING DATE: April 21, 1998
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette,
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION: (213) 489-1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C.
SOFTWARE: Word Perfect 5.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE: (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                104 GCAGATAAATGCCTA 118
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86.7%; Pred. No. 15;
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DB 1;

Length 15;

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                                                                                                                                    US-08-291-932A-188
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Patent No.
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Best Local Similarity
                                                                 Matches
                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: U.S.A.
ZIP: 90071-2066
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOTWARE: Word Perfect 5.1
                                                                                                                                                                                                                                                               CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/291,93:

PILING DATE: August 15, 1994

CLASSIFICATION: 514

PRIOR APPLICATION: DATA: including:

PRIOR APPLICATION DATA: described:

PRIOR APPLICATION DATA: described:

APPLICATION NUMBER: 08/245,466

FILING DATE: May 18, 1994

APPLICATION NUMBER: 07/987,132

FILING DATE: December 7, 1992

ATTORNEY/AGENT INFORMATION:

NAME: Warburg, Richard J:

REFERENCE/DOCKET NUMBER: 22,327

REFERENCE/DOCKET NUMBER: 208/157

TELEPHONE: (213) 489-1600

TELEPHONE: (213) 489-1600
                                                                                                                                                                                                             TELEX: 67-3510
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS
                                                                                                                                            LENGTH: 15 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: RIBOZYME TREATMENT OF TITLE OF INVENTION: DISEASES OR CONDITIONS TITLE OF INVENTION: NF-KB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
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                                                                             Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET: 633 West Pifth Street
STREET: Suite 4700
CITY: Los Angeles
STATE: California
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o. 5658780
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14 CCTCTCTAGGAGA 2
                             48 CCTCTCTAGTAGA 60
                                                               ch 8.7%; similarity 92.3%; 12; Conservative
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Draper, Kenneth G.
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described below:
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Pred. No. 15;
0; Mismatches
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                                                                 Score 11.4; D
Pred. No. 17;
0; Mismatches
                                                                                                                                                                                                                                                                                                                     208/157
                                                                                                DB 1; Length 15;
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                                                                 Indels
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RESULT 12

Sequence 91, Patent No. 5

Application US/08334847

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GENERAL INFORMATION:

APPLICANT: 1
APPLICANT: 1
APPLICANT: 1
APPLICANT: 1

Draper,

Kenneth

McSwiggen, James

Pavco, Pam Woolf, Tod

CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street

NUMBER OF SEQUENCES:

909

TITLE OF INVENTION: METHOD AND REAGENT FOR TITLE OF INVENTION: INHIBITING RESPIRATORY TITLE OF INVENTION: SYNCYTIAL VIRUS

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US-08-334-847-91/c
                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO: SEQUIENCE CHARACTERISTICS:
LENGTH: 15 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 90,
Patent No. 5
                                                                                                                                                   Query Match
Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US
FILING DATE: NO. 5693:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 20)
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
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TITLE OF INVENTION: METHOD AND REAGENT FOR
TITLE OF INVENTION: INHIBITING RESPIRATORY
TITLE OF INVENTION: SYNCYTIAL VIRUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS
                                                                                                                                                   Match 8.7%;
Local Similarity 92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM Com
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET: 633 West Fifth Street
STREET: Suite 4700
                                                                                                                                                                                                                                                                                                                              TELEX: 67-3510
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                                                                                                                                                                                                                                                                                                                                          TELEFAX:
                                                                                                                                                                                                                                                                                                                                            TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE:
                                                                  15 TCTAGTAGACCAT 3
                                                                                                 52 TCTAGTAGACAAT 64
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                                                                                                                                     Conservative
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                                                                                                                                                                                                                       linear
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                                                                                                                                                                                                                                                                                                            90:
                                                                                                                                                   Score 11.4;
Pred. No. 17
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                                                                                                                                      Indels
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                                                                                                                                   Gaps
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Los Angeles California

Suite 4700

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TOPOLOGY:
US-08-334-847-91
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Best Local Similarity
            COMPUTER READABLE FORM:
COMPUTER READABLE FORM:
MEDIUM TYPE: Storage
COMPUTER: IBM COMPATIBLE
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: FASTSQ VETSION 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/585,684B
FILING DATE: January 16, 1996
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEX: 67-3510
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS
LENGTH: 15 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: U.S.A.
ZIP: 90071-2066
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES: 2751
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Lyon
                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: METHOD AND REAGENT FOR THE TITLE OF INVENTION: INDUCTION OF GRAFT TOLERANCE AND REVERSAL OF IMMUNE RESPONSES
                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 209/032
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM Compatible OPERATING SYSTEM: IBM P.C. SOFTWARE: Word Perfect 5.1 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/08/334,84*
FILING DATE: No. 5693532ember 4,
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                 STREET: 633 West Fifth Street
STREET: Suite 4700
CITY: Los Angeles
STATE: Callfornia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: (213) 955-0440
APPLICATION NUMBER:
                                                                                                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                           793, Application US/08585684B
5. 5877021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 52 TCTAGTAGACAAT 64
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92.3%;
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60/000,951
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Pred. No. 17;
0; Mismatches
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US-08-585-684B-794/c
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; TOPOLOGY:
US-08-585-684B-794
                                                                                                                                                                                          OPERATING BIBLEM: LEWISTON OPERATING BIBLEM: LEWISTON 1.5
SOFTWARE: FASTESQ Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/585,684B
FILING DATE: January 16, 196
FRIOR APPLICATION NUMBER: 60/000,951
APPLICATION NUMBER: 60/000,951
AFILING DATE: JULY 7, 1995
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 218/078
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Best Local
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                                                                                 TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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INFORMATION FOR SEQ ID NO:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Jarvis, The Applicant: McSwiggen, TITLE OF INVENTION: NOTITLE OF INVENTION: NOTITLE OF INVENTION: NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: JULY 7, 1995
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard
REGISTRATION NUMBER: 32,3:
                                                                                                                                                         REFERENCE/DOCKET NUMBER: 21
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
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TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELECOMMUNICATION INFORMATION: TELEPHONE: (213) 489-1600
                                                       LENGTH:
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Local Similarity 92.3%;
nes 12; Conservative
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OPERATING SYSTEM:
SOFTWARE: FASTSEC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: 633 West Fifth Street
STREET: Suite 4700
                                 STRANDEDNESS:
                                                                                                                                        TELEPHONE: (213) 489-160
TELEFAX: (213) 955-0440
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California
                                                 nucleic acid
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                    linear
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SYSTEM: IBM P.C.
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Pred. No. 17;
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RESULT 17
US-09-038-073-794/c
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          Sequence 794, Application US/09038073
Patent No. 6194150
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                             APPLICATION:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: WAXDURY, Richard
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 218/078
TELECOMMUNICATION INFORMATION:
THE PHONE: (213) 489-1600
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Best Local Similarity
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Best Local 8
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NFORMATION FOR SEQ ID NO:
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                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS
LENGTH: 15 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: PASTSEQ Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/038,073
PILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Ly
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TITLE OF INVENTION:
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APPLICATION NUMBER: 08/585,684
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PPLICANT:
                                                                                                                                                                                                                                                                                                                                       TELEPHONE: (213) 955-0440
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STREET: Suite 4700
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TOPOLOGY: lir
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STATE: California
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Stinchcomb,
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92.3%;
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92.3%;
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Pred. No. 17;
0; Mismatches
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Pred. No. 17;
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                                                      APPLICANT: Zhang, Lin
APPLICANT: Zhou, Wei
APPLICANT: Zhou, Wei
APPLICANT: Zhou, Wei
TITLE OF INVENTION: Gene Expression Profiles in No. 6333152mal and
TITLE OF INVENTION: Cancer Cells
TITLE REFERENCE: 01107.74664
CURRENT APPLICATION NUMBER: US/09/081,646
CURRENT FILING DATE: 1998-05-20
EARLIER APPLICATION NUMBER: 60/047,352
EARLIER FILING DATE: 1997-05-21
NUMBER OF SEQ ID NOS: 871
NUMBER OF SEQ ID NOS: 871
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 662
                                                                                                                                                                                                                                                                                     Sequence 662, Application US/09081646
Patent No. 6333152
GENERAL INFORMATION:
APPLICANT: Kinzler, Kenneth
APPLICANT: Vogelstein, Bert
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FILING DATE:
PRIOR BOTTO:

OSCIPPANT: US/09/^^
PRIOR BOTTO:
PRIOR BOTTO:
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
TYPE: DNA
ORGANISM: Homo sapiens
                                        LENGTH: 15
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MEDIUM TYPE: 3.5" Diskette, 1.44
MEDIUM TYPE: storage
COMPUTER: IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: 21
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEPAX: (213) 955-0440
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ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard
NAME: Warburg, Richard
REGISTRATION NUMBER: 32,327
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TITLE OF INVENTION:
NUMBER OF SEQUENCES:
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PRIOR APPLICATION DATA:
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TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth
STREET: Suite 4700
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Local Similarity 92.3%;
les 12; Conservative
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STATE: California
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15
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Pred. No. 17;
0; Mismatches
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; Sequence 7, Application US/08379079
                RESULT 20
US-08-379-079-7
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                                                                                                                           Query Match
Best Local Similarity
Matches 10; Conserve
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; ANTI-SENSE: YI
US-08-453-224-7
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Ve.
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/453,224
FILING DATE: 30-MAY-1995
CLASSIFICATION BATA:
PRICATION DATA:
US/08/379,079
APPLICATION NUMBER: US/08/379,079
FILING DATE: 26-JAN-1995
FILING DATE: 26-JAN-1995
FILING DATE: 26-JAN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
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etent No. 5627274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Dominski, Zbigniew T.
TITLE OF INVENTION: Antisense Oligonuclectides Which Combat
TITLE OF INVENTION: Aberrant Splicing and Methods of Using the Same
                                                                                                                                                                                                                                                                                                                                                                                   TELECOMMUNICATION INFORMATION: TELEPHONE: 919-881-3140
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APPLICANT: Dominski, Zbi
                                                                                                                                                                                                                                                                                                                                   TELEFAX: 51.
TEX: 575102
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE: No. COUNTRY: U. ZIP: 28234
                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Sibley, Kenneth D.
REGISTRATION NUMBER: 31,665
REFERENCE/DOCKET NUMBER: 5470-63
                                                                                                                                                                                                                                                                     STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET:
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                                                                                                                                                                                                                                                         TOPOLOGY:
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                                                                                                              115 CCTAACGACTATCC 128
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: No. 5627274th Carolina
RY: U.S.A.
                                                                                                                                                                                                                                                                                  d: 14 base pairs nucleic acid
                                                                                CCCAAAGACUAUCC 14
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                                                                                                                                             Conservative
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92.3%;
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Pred. No. 17;
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                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: Kole, Ryszard
APPLICANT: Dominski, Zbigniew T.
APPLICANT: Dominski, Zbigniew T.
TITLE OF INVENTION: Aberrant Splicing and Methods of Using the Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION: RYB: APPLICANT: Kole, RyB: APPLICANT: Dominski,
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INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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NAME: Sibley, Kenneth D.
REGISTRATION NUMBER: 31,665
REFERENCE/DOCKET NUMBER: 5470
TELECOMMUNICATION INFORMATION:
TELEPHONE: 919-881-3140
                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: Kenneth D. Sibley; Bell, Seltzer, Park
ADDRESSEE: Gibson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/379,079
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CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 1
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TITLE OF INVENTION: Antisense Oligonuclectides Which Combat
TITLE OF INVENTION: Aberrant Splicing and Methods of Using the Same
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ANTI-SENSE: Y
                                                                                                                                                         NUMBER OF SEQUENCES:
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COMPUTER READABLE FORM:
                  STREET: POSC
CITY: Charlotte
CTATE: No. 5916808th Carolina
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TOPOLOGY: lir
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STATE: No. 5665593th Carolina
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TELEFAX: 919-881-3175
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ADDRESSEE: Gibson
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Pred. No. 18;
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MEDIUM TYPE:

Floppy disk

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RESULT 22
US-09-302-390-7
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Best Local Similarity
Matches 10; Conser
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INFORMATION FOR SEQ ID NO:
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LENGTH: 14 base pairs
TYPE: nucleic acid
                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: ISM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PACENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/379,079
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Dominski, Zbigniew T.
TITLE OF INVENTION: Antisense Oligonuclectides Which
TITLE OF INVENTION: Aberrant Splicing and Methods of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ANTI-SENSE:
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REFERENCE/DOCKET NUMBER: 54
TELECOMMUNICATION INFORMATION:
TELEPHONE: 919-881-3140
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APPLICATION NUMBER:
FILING DATE:
                ATTORNEY/AGENT INFORMATION: NAME: Sibley, Kenneth D
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STREET: POBL ...
CITY: Charlotte
STATE: NO. 5978879th Carolina
T S.A.
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                                                                                                                    APPLICATION NUMBER: US/09/302,390 FILING DATE:
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                                                                                                      CLASSIFICATION:
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NAME: Sibley, Kenneth REGISTRATION NUMBER:
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71.4%; Pred. No. 18;
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                                                                                          PCT-US94-05181-7
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                               Query Match
Best Local Similarity 71.4
Matches 10; Conservative
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Best Local Similarity
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                      TELEX: 575102
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                    CLASSIFICATION:
ATTORIXY AGENT INFORMATION:
ATORIXY AGENT INFORMATION:
NAME: Sibley, Kenneth D
REGISTRATION NUMBER: 31,665
REFERENCE/DOCKET NUMBER: 5470
TELECOMMUNICATION INFORMATION:
TELEPHONE: 919-881-3140
                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 14 base pairs
                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/05181
FILING DATE:
FILING DATE:
                                                                                                           TOPOLOGY: lin
MOLECULE TYPE:
ANTI-SENSE: YES
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TITLE OF INVENTION: Antisense Oligonucleotides which
TITLE OF INVENTION: Combat Aberrant Splicing and Methods of Using the Same
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ANTI-SENSE: Y
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 919-881-3140
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TYPE: nucleic acid
STRANDENNESS: single
TOPOLOGY: linear
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 115 CCTAACGACTATCC 128
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Pred. No. 18;
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                                                 Score 10.8;
Pred. No. 10
                               Mismatches
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                                Gaps
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RESULT 24
5171840-9/c
;Patent No. 5171840
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: KISHIMOTO, TADAMITSU
TITLE OF INVENTION: RECEPTOR PROTEIN FOR HUMAN B CELL
STIMULATORY FACTOR-2
, NUMBER OF SEQUENCES: 11
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/298,694
                                                                       US-08-520-194-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO:9:
Query Match
Best Local Similarity 100.0%; P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 6, Application US/08520194 Patent No. 5681705
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 7.9%;
Best Local Similarity 91.7%;
                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
NAME: Fugit, Donna R.
REGISTRATION NUMBER: 32,135
REFERENCE/DOCKET NUMBER: P-3
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                     TOPOLOGY: 1i
MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: AMPLIFICATION AND DETECTION OF TITLE OF INVENTION: MYCOBACTERIUM AVIUM COMPLEX SPECIES NUMBER OF SEQUENCES: 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                   LENGTH: 11 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/08/520,194 FILING DATE: CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: 1 Becton Driv
CITY: Franklin Lakes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE: Richard J. Rodrick, Becton Dickinson and ADDRESSEE: Company STREET: 1 Becton Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 19-JAN-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 13
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Nadeau, James G.
Dean, Cheryl H.
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                                                                                                        linear
                                                                                     DNA (genomic)
                                                                                                                                                                                                              P-3274
                     Score 10;
; Pred. No.
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     Mismatches
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                     DB 1;
17;
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                                   Length 11;
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   Gaps
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Query Match

7.5%; Score 9.8;

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Patent No.
                                                                                                                                                                                                                          TELEPHONE: (415) 324-0880
TELEFAX: (415) 324-0960
INFORMATION FOR SEQ ID NO: 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Tam, Albe-
APPLICANT: Krawczynsi
APPLICANT: Yarbough,
TITLE OF INVENTION: 1
NUMBER OF SEQUENCES:
                                                                                      MOLECULE TYPE:
HYPOTHETICAL: N
ANTI-SENSE: NO
                                                                                                                                                                                                                                                           FILING DATE: 17-JUN-1988
ATTORNEY/AGENT INFORMATION:
NAME: Sholtz, Charles K.
REGISTRATION NUMBER: 38,615
REFERENCE/DOCKET NUMBER: 4600-0093.20
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC Compatible
ODERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/259,148A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZIP: 94306
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATA:
PRIOR APPLICATION DATA:
PRIOR APPLICATION NIMBER: US 336,672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 367,486
                                                                   ORIGINAL SOURCE:
                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
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APPLICATION NUMBER:
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APPLICATION NUMBER: US 822,335
FILING DATE: 17-JAN-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: Dehlinger & Associates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
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ZIP: 943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 13
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 3 FILING DATE: 11-APR-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: FILING DATE: 16-JU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: Palo Alto
                                                                                                                                                        STRANDEDNESS:
                                                                                                                                                                         LENGTH: 13 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Krawczynski, Krzysztof Z.
Yarbough, Patrice D.
NVENTION: Hepatitis E Virus Vaccine and Method
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Reyes, Gregory R.
Bradley, Daniel W.
Twu, Jr-Shin
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                                                                                                                                         unknown
                                                     ISOLATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13-OCT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-APR-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13-JUN-1994
                                                                                                                         DNA
                                                                                                                                                            unknown
                                                                                                                                                                                                                                                                                                                                                                                            US 208,997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US 505,888
                                                   DNA sequence, Fig.
   DB 1;
Length 13;
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Best Local Similarity 84.6%; Pred. No. 21; Matches 11; Conservative 0; Mismatches

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0;

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RESULT 27
US-07-876-941A-70
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; ORIGINAL SOURCE:
; INDIVIDUAL ISOLATE:
US-07-876-941A-70
                                                                                                                                                                          NAME: Sholtz, Charles K.

REGISTRATION NUMBER: 38,615
REFERENCE/DOCKET NUMBER: 4600-0093.33
TELECOMMUNICATION: INFORMATION:
TELEPHONE: (415) 324-0860
TELEPAX: (415) 324-0960
INFORMATION FOR SEQ ID NO: 70:
SEQUENCE CHARACTERISTICS:
LENGTH: 13 base pairs
TYPE: mucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTMARE: PATENTIA Release #1.0, Version #1.25
SOPTMARE: DATE: Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/876,941A
FILING DATE: 01-MAY-1992
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 822,335
FILING DATE: 17-JAN-1992
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
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Sequence 70, App-
Sequence 70, App-
No. 5885768
                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION UNMER: US 505,888
APPLICATION UNMER: US 420,921
APPLICATION UNMER: US 420,921
APPLICATION UNMER: US 420,921
APPLICATION UNMER: US 367,486
PILING DATE: 13-OCTOBER-1989
PRIOR APPLICATION UNMER: US 367,486
PILING DATE: 16-JUNE-1989
PRIOR APPLICATION DATA:
APPLICATION UNMER: US 336,672
FILING DATE: 11-APRIL-1989
PRIOR APPLICATION DATA:
APPLICATION UNMER: US 208,997
APPLICATION UNMER: US 208,997
PILING DATE: 17-JUNE-1988
APTORNAY/AGENT INFORMATION:
NAME: SPOILT CHAPTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: USA
ZIP: 94306
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
ADDRESSEE: Dehlinger & Associates
STREET: 350 Cambridge Avenue, Suite 250
CITY: Palo Alto.
STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: Hepatitis E Virus Peptide Antigen and TITLE OF INVENTION: Antibodies NUMBER OF SEQUENCES: 76
                                                                     ANTI-SENSE: NO
                                                                                        TOPOLOGI.
NOLECULE TYPE: DN
                                                                                                                                       STRANDEDNESS: unknown
TOPOLOGY: unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/07876941A
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Bradley, Daniel W.
Tam, Albert W.
Mitchell, Carl
                      DNA sequence, Fig. 7
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Search completed: December 9, 2004, 17:25:17 Job time : 1 secs

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Result
No.
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Maximum Match 100%
Listing first 14 summaries
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                                                                                                                                    RESULT 1
US-09-883-119A-19
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Maximum DB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                       0 0 0 0 0 0 0
Sequence 19, Application US/09883119A
Publication No. US20030104520A1
Publication No. US20030104520A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: The University of Texas System Board of Regents
TITLE OF INVENTION: Regulatable, Catalytically Active Nucleic Acids
FILE REFERENCE: 119927-1050
FULE REFERENCE: 119927-1050
CURRENT APPLICATION NUMBER: US/09/883,119A
CURRENT FILING DATE: 2000-06-14
PRIOR APPLICATION NUMBER: 60/212,097
PRIOR FILING DATE: 2000-06-15
                                                                                                                                                                                                                                                   110 9 8 7 6 5 1 1 1 1 2 1 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                               Score
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30.8
30.8
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seq length: 100
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                                                                                                                                                                                                                                                                                                                                                                                                                                               Query
Match
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131
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gapop 10.0 , Gapext 0.
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12.4
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                                                                                                                                                                                                                                                                                                                                                                                                                                               Length DB
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US-09-231-235-61

US-09-797-51BA-61

US-09-872-696A-61

US-09-883-119A-17

US-10-786-720-10954

US-10-786-720-10956

US-09-883-119A-19

US-10-317-80-16

US-09-883-119A-19

US-10-317-80-16

US-09-504-231A-513

US-10-274-553D-513

US-10-56-414-188

US-10-33-674-138
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Compugen Ltd.
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Sequence 16, Appl
Sequence 513, App
Sequence 513, App
Sequence 188, App
Sequence 1630, Ap
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Sequence 61,
Sequence 61,
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Sequence 17,
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e 61, Appl
e 61, Appl
e 61, Appl
e 61, Appl
e 17, Appl
e 10954, A
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Query Match

58.0%;

Score 76;

DB 1;

Length 94;

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US-09-231-235-61
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APPLICANT: Sauter, Sybille L.
APPLICANT: Hau, David
APPLICANT: Sheridan, Philip Lee
APPLICANT: Bardy, Steven
APPLICANT: Dubenaky, Thomas
APPLICANT: Yee, Jiing-Kuan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 23
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Query Match
Best Local S
Matches 23
                                                                                          Sequence 61, Application US/09872696A
publication No. US20030104611A1
GENERAL INFORMATION:
APPLICANT: Johnston, Julie C.
APPLICANT: Sauter, Sybille L.
APPLICANT: Hau, David
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Matches
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Patent No. US20020048805A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 100.0%; Pred. No. 0.026; Matches 76; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                               APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Johnston, Julie C. APPLICANT: Sauter, Sybille L. APPLICANT: Hsu, David APPLICANT: Sheridan, Philip Le
                                                                                                                                                                                                                                                                                                                   APPLICANT:
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. Similarity 67. 23; Conservative
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                                                                                 Hsu, David
Sheridan, Philip Lee
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Hardy, Steven
Dubensky, Thomas
                                                          Hardy, Steven
Dubensky, Thomas
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                                               Yee,
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                                               Jiing-Kuan
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67.6%;
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 Score 30.8; Di
Pred. No. 2.9;
9; Mismatches
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Pred. No. 2.9;
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Pred. No. 2.9;
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Sequence 10956, Application US/10786720

Publication No. US20040191818A1

GENERAL INFORMATION:
APPLICANT: Wyeth
APPLICANT: Wyeth
APPLICANT: Liu, Wei
ITITLE OF INVENTION: COMPOSITIONS AND METHODS FOI
TITLE OF INVENTION: DISEASES
FILE REFERENCE: 031896-023000 (AM101331L)
CURRENT APPLICATION NUMBER: US/10/786,720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; Sequence 10954, Application US/10786720
; Publication No. US20040191818A1
; GENERAL INFORMATION:
   APPLICANT: Wyeth
   APPLICANT: O'Toole, Margot
   APPLICANT: Liu, Wei
   TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THITLE OF INVENTION: DISEASES
   FILE REFERENCE: 031895-023000 (AM101331L)
; CURRENT APPLICATION NUMBER: US/10/786,720
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US-10-786-720-10954/c
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US-09-883-119A-19/c
                RESULT
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US-09-883-119A-17
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Best Local S
Matches 23
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Publication No. US20030104520A1
GENERAL INFORMATION:
APPLICANT: The University of Texas System Board of Regents
TITLE OF INVENTION: Regulatable, Catalytically Active Nucleic Acids
                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                       Matches
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Best Local :
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CURRENT APPLICATION NUMBER: US/09/883,119A
CURRENT FILING DATE: 2000-06-14
PRIOR APPLICATION NUMBER: 60/212,097
PRIOR FILING DATE: 2000-06-15
                                                                                      82 CAGCATCGTCTTGATGCCCTT 102
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                                                                    CAGCAUCAUGUUGAUGCCAUU 21
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nilarity 85.7%;
Conservative (
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Pred. No. 11;
7; Mismatches
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Pred. No. 11;
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Best Local S
Matches 12
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Best Local S
Matches 16
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Publication No. US20030104520A1
GENERAL INFORMATION:
APPLICANT: The University of Texas System Board of Regents
APPLICANT: The University of Texas System Board of Regents
TITLE OF INVENTION: Regulatable, Catalytically Active Nucleic Acids
FILE REFERENCE: 119927-1050
CURRENT APPLICATION NUMBER: US/09/883,119A
CURRENT FILING DATE: 2000-06-14
PRIOR APPLICATION NUMBER: 60/212,097
                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                         Sequence 513, Application US/09504231A Patent No. US20020013458A1
                                                              Matches
                                                                            Query Match
Best Local Similarity
                                                                                                                           APPLICANT: Macejak, Dennis
TITLE OF INVENTION: ENZYMATIC NUCLEIC ACID TREATMENT OF DISEASES OR CONDITIONS RELATED
TITLE OF INVENTION: HEPATITIS C VIRUS INFECTION
                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Chetverin, Alexander B.
APPLICANT: Kramer, Fred Russel
TITLE OF INVENTION: NOVEL OLIGONUCLECTIDE ARRAYS AND THEIR USE FOR SORTING,
TITLE OF INVENTION: ISOLATING, SEQUENCING, AND MANIPULATING NUCLEIC ACIDS
FILE REFERENCE: 07763-004002
CURRENT APPLICATION NUMBER: US/10/331,780
CURRENT FILING DATE: 2002-12-31
                                                                                                                                                                                                           APPLICANT: Blatt, Lawrence APPLICANT: McSwiggen, Jam
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                104 GCAGATAAATGCCTA 118
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GCAGGTAGATGCCTA 1
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Roberts, Beth
Pavco, Pamela
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ilarity 100.0%;
Conservative
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86.7%;
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                                                                               Score 11.8;
Pred. No. 16;
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Pred. No.
                                                             Mismatches
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Sequence 513, Application US/09274553D Patent No. US20020082225A1 GENERAL INFORMATION:

APPLICANT: Blatt, Lawrence

APPLICANT: APPLICANT: APPLICANT:

Blatt, _ McSwiggen, Jame McSwiggen, McSwiggen, Jame McSwiggen, Mc

Pamela

RESULT 11 US-09-274-553D-513/c

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P. E. S. Part.

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US-10-056-414-188/c
US-10-056-414-188/c
; Sequence 188, Application US/10056414
; Publication No. US20030003469A1
; GENERAL INFORMATION:
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US-10-440-850-368/c
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US-10-339-674-1630/c
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                                                                          Sequence 368, Application US/10440850
Publication No. US20030207837A1
GENERAL INFORMATION:
APPLICANT: Ribozyme Pharmaceuticals, Inc.
APPLICANT: Stinchcomb, Dan
APPLICANT: Jarvis, Thale
APPLICANT: McSwiggen, Jim
TITLE OF INVENTION: Method and Reagent for the Induction of Graft Tolerance and Rever
FILE REFERENCE: 250/130 (MBHB00-900-A)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1630, Application US/10339674

Publication No. US20030204318A1

Publication No. US20030204318A1

Publication No. US20030204318A1

PERFORMATION:

APPLICANT: Peldmann, Richard J.; Global Determinants, Inc.

TITLE OF INVENTION: Escherichia coli K-12 MG1655 complete genome.

FILE REFERENCE: Jim Zegeer Law Offices - 703-684-8333

CURRENT APPLICATION NUMBER: US/10/339,674

CURRENT FILLING DATE: 2003-06-06

NUMBER OF SEQ ID NOS: 3537

SOPTWARE: Proprietary
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Query Match 8.7%; Score 11.4; 1
Best Local Similarity 92.3%; Pred. No. 16;
Matches 12; Conservative 0; Mismatches
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Best Local &
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TITLE OF INVENTION: ENZYMATIC NUCLEIC ACID TREATMENT OF DISEASES OR CONDITIONS RELATE
TITLE OF INVENTION: HEPATITIS C VIRUS INFECTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Match 8.7%; Score 11.4; Local Similarity 92.3%; Pred. No. 16;
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Draper, Kenneth G.
McSwiggen, James
TITLE OF INVENTION: RIBOZYME TREATMENT OF
DISEASES OR CONDITIONS
RELATED TO LEVELS OF
                                                                                                                                                                                                                                                                                                                                                                                      107 GATAAATGCCTAA 119
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ACCESSION: AR033725
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ACCESSION: AR113369
ACCESSION: AR132369
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ACCESSION: AX497751
ACCESSION: AX790751
ACCESSION: AX7905641
ACCESSION: AX705643
ACCESSION: AX822833
ACCESSION: AX822833
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Query Match Best Local Matches 3	RESULT 2 AR343402 LOCUS LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM REFERENCE AUTHORS TITLE JOURNAL FEATURES BOUICE	Query Match Best Local Matches 3 Qy 73 Db 1	FEATURES Source	TITLE JOURNAL COMMENT	RESULT 1 BD248913 LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM REFERENCE AUTHORS	C 34 11 C 35 11
ch 24.3%; Score 31.8; DB 1; Length 40; [1 Similarity 94.3%; Pred. No. 0.83; 33; Conservative 0; Mismatches 2; Indels 0; Gaps 0;	AR343402 AR343402 Sequence 1 from patent US 6579681. AR343402 AR343402.1 GI:33738945 . Unknown. Unknown. Unclassified. 1 (bases 1 to 40) Huls,C., Bauer,B., Simandi,C., Luhrmann,R., Achsel,T. and Vornlocher,HP. Test system for detecting a splicing reaction and use thereof Patent: US 6579681-A 1 17-JUN-2003; Location/Qualifiers 1. 40 /organism="unknown" /mol_type="unassigned RNA"	ch 24.3%; Score 31.8; DB 1; Length 40; 1 Similarity 94.3%; Pred. No. 0.83; Indels 0; Gaps 0; 33; Conservative 0; Mismatches 2; Indels 0; Gaps 0; 73 AAATTATACCAGCATCGTCTTGATGCCCTTGGCAG 107 74	Aptamer Aptamer FH Key 140 FT source /organism='Artificial Sequence'. FT Location/Qualifiers 140 /organism="synthetic construct" /mol_type="genomic RNA" /db_xref="taxon:32630"	Test system for detecting a splicing reaction and use thereof patent: JP 2002537822-A 1 12-NOV-2002; AVENTIS RESEARCH AND TECHNOLOGIES GMBH AND CO KG OS Artificial Sequence PN JP 2002537822-A/1 PD 12-NOV-2002 PF 25-FEB-2000 JP 2000602811 PR 02-MAR-1999 DE 199 09 156.0 PI CHRISTOPH HULS, BETTINA BAUER, CLAUS SIMANDI, REINHARD LUEHRMANN, PI TILMANN ACHSEL, HANS PETER VORNLOCHER C12N15/09,C12Q1/68,G01N33/53,G01N33/566,G01N33/58,C12N15/00 CC	BD248913 Test system for detecting a splicing reaction and use thereof. BD248913.1 GI:33058683 JP 2002537822-A/1. synthetic construct synthetic construct artificial sequences. 1 (bases 1 to 40) Huls, C., Bauer, B., Simandi, C., Luehrmann, R., Achsel, T. and Vornlocher, H.P.	1.4 8.7 15 1 AX638102 ACCESSION:AX638102 1.4 8.7 15 1 AX638103 ACCESSION:AX638103 ALIGNMENTS

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Polisky,B., Jenison,R.D. and Gold,L.
High-affinity nucleic acid ligands that
theophylline and caffeine
Patent: US 5580737-A 29 03-DEC-1996;
Location/Qualifiers
           I30287.1 GI:1821078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Patent: DE 19909156-A 1 07-SEP-2000;
AVENTIS RES & TECH GMBH & CO (DE)
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Sequence 1 from Patent DE19909156.
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llarity 94.3%;
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29 from patent US 5580737.
                                 37 from patent
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/mol_type="unassigned RNA"
/db_xref="taxon:32630"
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Pred. No. 0.83;
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US 5580737.
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                                                 Ellington,A.D., Hesselberth,J., Marshall,K., Rot Sooter,L., Davidson,E., Cox,J.C. and Reidel,T. Regulatable, catalytically active nucleic acids Patent: WO 0196559-A 18 20-DEC-2001; Board of Regents, The University of Texas System Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 40)
Polisky,B., Jenison,R.D. and Gold,L.
High-affinity nucleic acid ligands that
theophylline and caffeine
Patent: US 5580737-A 6 03-DEC-1996;
Location/Qualifiers
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Polisky,B., Jenison,R.D. and Gold,L.
High-affinity nucleic acid ligands that
theophylline and caffeine
Patent: US 5580737-A 37 03-DEC-1996;
                                                                                                                                                          synthetic construct
synthetic construct
                                                                                                                                                                                                              Sequence 18
AX427118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 6
I30256
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/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
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/mol_type="unassigned DNA"
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Pred. No. 1.1;
0; Mismatches 1;
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US 5580737.
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DOGSCN4AB
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AX590751/c
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                                                                                                                    application to the canine genome
Unpublished (1996)
Original source text: Canis familiaris DNA.
Gene-specific universal mammalian sequence-tagged site for SCN4A.
Primer for the 3' end is in exon 24. Human product is 1177 bp.
Canine product is 1100 bp. PCR conditions: 1 min, 94 C, 2 min, 57
C, 3 min, 72 C, 35 cycles.
                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.

1 (bases 1 to 20)

Venta, P.J., Brouillette, J.A., Yuzbasiyan-Gurkan, V. and Brewer, G.J. Gene, specific universal mammalian sequence-tagged sites:
                                                                                                                                                                                                                                                                                                                                                                                                                  DOGSCN4AB 20 bp Canis familiaris skeletal muscle
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                                                                                                                                                                                                                                                                                                                                     L77475.1 GI:1261762
STS; PCR identification; PCR primer; sequence tagged
muscle sodium channel; universal mammalian STS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    synthetic construct
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Canis familiaris
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                                      /db_x
                                                                                                      Location/Qualifiers
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/db_xref="taxon:32630"
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/note="PCR primer binding site"
/evidence=experimental
                                            /organism="Canis familiaris"
/mol_type="genomic DNA"
/db_xref="taxon:9615"
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Pred. No. 13;
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Pred. No. 3
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AX705643
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Sequence 310 from Patent W003014388.
AX705641
AX705641.1 GI:29562306
                                                                                                                                                           Distler, J., Model, F. and Taubert, H. Method and nucleic acids for the analysis Patent: WO 03014388-A 312 20-FBB-2003; Epigenomics AG (DE)
                                                                                                                                                                                                                                 synthetic construct synthetic construct
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/mol type="unassigned DNA"
/mol type="taxon:22630"
/more="Detection oligonucleotide
                                                                                         /organism="synthetic construct"
/mol type="unassigned DNA"
/mb xref="taxon:32630"
/mbe="Detection oligonucleotide
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Pred. No. 18;
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RESULT 12

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RESULT 14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 CAATCCCGTGCTAAATT 77
                     Sequence 10
AX255681
AX255681.1
                                                                                                                                         61 CAATCCCGTGCTAAATT 77
                                                                                                                                                                  15;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
AX826473
                                                                                                                                                                                                                                                                                           Rujan, T. and Schmitt, A. Method and nucleic acids for the analysis of proliferactive disorder Patent: WO 03072821-A 725 04-SEP-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Method and nucleic acids for the analysis of a colon cell proliferative disorder Patent: EP 1340818-A 725 03-SEP-2003;
                                                                                                                                                                                                                                                                       Epigenomics AG (DE)
Location/Qualifiers
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                                                                                                                                                                  Conservative
                                              102 from Patent
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                                                                                                                                                                                                                                                                                                                                                                                                                                               725 from Patent
                                                                                                                                                                                                                           /mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                   organism="synthetic construct"
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/db_xref="taxon:32630"
                                                                                                                                                                                                                /note="Detection oligonucleotide for PGR"
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                      GI:16074736
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SOURCE
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AX729684/c
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DEFINITION
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AX674315/c
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Sequence
AX674315
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Sequence 1318 from Pater
AX729684
AX729684.1 GI:30509027
                         Telerman,A., Amson,R. and Tuijnder,M. Sequences involved in phenomena of tumour suppression, tumor reversion, apoptosis and/or virus resistance and their use
                                                                                                                 Homo sapiens (human)
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Location/Qualifiers
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Patent: WO 0170982-A 102 27-SEP-2001;
Immusol Incorporated (US) ; Beger, Carmela
Location/Qualifiers
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Patent:
                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
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               medicines
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WO 03025175-A 1318
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                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
/mol_type="unassigned DN
/db_xref="taxon:9606"
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/mol_type="unassigned DNA"
/db_xref="taxon:32630"
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Pred. No. 21;
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WO03025175.
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Sequence 2422 from Patent
AX736832
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Patent: WO 03025177-A 2422 27-MAR-2003;
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Location/Qualifiers
                                                           Patent: WO 03040369-A 1878 15-MAY-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                       Telerman,A., Amson,R. and Tuijnder,M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral revisitance phenomena and their use as medicines
                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                     Homo sapiens
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                                                                                                                                                                                                                                                                                   Sequence 1878 from Patent
AX758557
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Location/Qualifiers
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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ilarity 87.5%;
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/mol_type="unassigned DNA"
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/mol_type="unassigned DNA"
/db_xref="taxon:9606"
organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
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Sullivan, S., Draper, K.G., McSwiggen, J. and
IL-5 targeted ribozymes
Patent: US 5616488-A 449 01-APR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 449 from patent US
139411
139411.1 GI:2083891
                                                                                                                                                                                                            Stinchcomb, D.T., Dudycz, L.W., Chowrira, B., Grimm, S., Direnzo, A., Karpeisky, A., Draper, K.G., Kisich, K., Matulic-Adamic, J., Mcswiggen, J.A., Modak, A., Pavco, P., Beigelman, L., Sullivan, S.M., Sweedler, D., Thompson, J.D., Tracz, D., Usman, N., Wincott, F.E. and
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                                                                                                                                                    Patent: EP 1260586-A 2844 27-NOV-2002; RIBOZYME PHARMACEUTICALS, INC. (US)
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                                                                                                                                                                                      Method and reagent for inhibiting the expression of disease related
                                                                                                                                                                                                                                                                       unclassified
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                                                                                         /organism="unidentified"
/mol_type="unassigned RNA"
/db_xref="taxon:32644"
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/mol_type="unassigned DNA"
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Unclassified.
1 (bases 1 to 15)
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1 (bases 1 to 15)
Praper,K.G.
Method and reagent for inhibiting hepatitis C virus replication Method and reagent for Patent: US 5869253-A 491 09-FEB-1999;
Location/Qualiflers
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Sequence
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Sequence
AR261549
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               1 (bases 1 to 15)
Draper,K.G.
Method and reagent for inhibiting hepatitis C virus replication
Patent: US 6132966-A 491 17-OCT-2000;
Location/Qualifiers
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Chetverin, A.B. and Kramer, F.R.
Oligonucleotide arrays and their use for sorting, sequencing, and manipulating nucleic acids patent: US 6322971-A 16 27-NOV-2001;
Location/Qualifiers
                                                                            Unknown.
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/mol_type="genomic DNA"
organism="unknown"/
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Best Local Similarity 86.7%;
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Blatt, L., Mcswiggen, J.A., Roberts, B., Pavco, P.A. and Macejak, D. Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection

Patent: JP 2002512791-A 1048 08-MAY-2002;

RIBOZYME PHARMACBUTICALS INC
OS Hepatitis virus (hepatitis C virus)

PN JP 2002512791-A/1048

PD 08-MAY-2002

PF 26-ARR-1998 US 60/083217, 18-SEP-1998 US 60/100842 PR

PR 27-APR-1998 US 60/083217, 18-SEP-1998 US 60/100842 PR
                                                                                             Sequence 491 from patent US 5
               Unknown.
Unclassified.
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to hepatitis C virus infection.
BD207458
BD207458.1 GI:33017228
JP 2002512791-A/1048.
                                                Unknown.
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27-APR-1998 US 60/083217,18-SEP-1998 US 60/100842

25-FEB-1999 US 09/257608,23-MAR-1999 US 09/274553 PI

LAWRENCE BLATT, JAMES A MCSWIGGEN, ELISABETH ROBERTS, PAMELA A
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nilarity 86.7%;
Conservative
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Key Location/Qualifie
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                                                                                                                                                                                                                                                                                                                                              /organism="unidentified"
/mol_type="genomic RNA"
/db_xref="taxon:32644"
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                                                                                  GI:2483018
                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism='Hepatitis virus (hepatitis virus)'.
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Best Local Similarity 86.7%;
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Unclassified.
1 (bases 1 to 15)
1 (bases 1... Jarvis, T. and McSwiggen, J.
3 Stinchcomb, D.T., Jarvis, T. and McSwiggen, J.
Nucleic acid based inhibition of CD40
Nucleic us 6194150-A 793 27-FEB-2001;
L Patent: US 6194150-A 793 27-FEB-2001;
Location/Qualifiers
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Vogelstein,B., Kinzler,K.W., Zhang,L. &
Gene expression profiles in normal and
Patent: US 6333152-A 677 25-DBC-2001;
Location/Qualifiers
                                             12;
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Enzymatic RNA molecule targeted against Hepatitis
Patent: US 5610054-A 491 11-MAR-1997;
Location/Qualifiers
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TCGTATTGATGCC 3
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                                                                                      /organism="unknown"
/mol_type="unassigned
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/mol_type="unassigned DNA"
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/mol_type="unassigned DNA"
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AR132369
                                1 (bases 1 to 15)

McSwiggen, J., Draper, K., Pavco, P. and Woolf, T.

Respiratory syncytial virus ribozymes

Patent: US 5693532-A 90 02-DBC-1997;
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Stinchcomb, D.T., Draper, K.G. and McSwiggen, J.
Rel a targeted ribozymes
Patent: US 5658780-A 188 19-AUG-1997;
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Stinchcomb, D.T., Jarvis, T. and McSwiggen, J.
Nucleic acid based inhibition of CD40
Patent: US 6194150-A 794 27-FEB-2001;
Location/Qualifiers
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Sequence 90 from
177383
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794 from patent US 6
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/mol_type="unassigned DNA"
                     Location/Qualifiers
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/mol_type="unassigned DNA"
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organism="unknown"
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AR180594/c
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Sequence 3159 from Patent
AX636020
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AR180594
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177384
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Vogelstein, B., Kinzler, K.W., Zhang, L. a
Gene expression profiles in normal and
Patent: US 6333122-A 662 25-DEC-2001;
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McSwiggen,J., Draper,K., Pavco,P. and

Respiratory syncytial virus ribozymes

Patent: US 5693532-A 91 02-DEC-1997;

Location/Qualifiers
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Similarity 92.3%;
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662 from patent US 6
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/mol_type="unassigned
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/mol_type="unassigned DNA"
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SOURCE
ORGANISM
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AUTHORS
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ACCESSION
VERSION
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AUTHORS
SOURCE
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ORGANISM
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AX638102/c
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                                          AX638103
Sequence 5242 from Patent
AX638103
AX638103.1 GI:28473717
                                                                                                                                                                                                                                                                                                                                                 Patent: EP 1260586-A 5241 27-NOV-2002;
RIBOZYME PHARMACEUTICALS, INC. (US)
Location/Qualifiers
unidentified unidentified
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Sequence 5241 from Patent
AX638102
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Stinchcomb,D.T., Dudycz,L.W., Chowrira,B., Grimm,S., Direnzo,A., Karpeisky,A., Draper,K.G., Kisich,K., Matulic-Adamic,J., Mcswiggen,J.A., Modak,A., Pavco,P., Beigelman,L., Sullivan,S.M., Sweedler,D., Thompson,J.D., Tracz,D., Usman,N., Wincott,P.E. and Woolf,T.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     unidentified unidentified
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                                                                                                                                                                                                                                                                                      /organism="unidentified"
/mol_type="unassigned RNA"
/db_xref="taxon:32644"
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/mol_type="unassigned RNA"
/db_xref="taxon:32644"
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92.3%;
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Pred. No. 25;
0; Mismatches
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REFERENCE
AUTHORS
Search completed: December 9, 2004, 17:19:02 Job time : 1 secs
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Source
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                                                                               52 TCTAGTAGACAAT 64
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Patent: EP 1260586-A 5242 27-NOV-2002;
RIBOZYME PHARMACEUTICALS, INC. (US)
Location/Qualifiers
1. .15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              unclassified.
                                                                                                                                                                                                                                           /organism="unidentified"
/mol_type="unassigned RNA"
/db_xref="taxon:32644"
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Result
No.
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic; OTHER INFORMATION: oligonucleotide US-10-239-958-102
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Maximum DB
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                                                                                                                                                                                                                       Sequence 102, Application US/10239958
GENERAL INFORMATION:
APPLICANT: BARBER, JACK
APPLICANT: WONG-STAAL, FLOSSIE
TITLE OF INVENTION: BRCA-1 REGULATORS AND
FILE REFERENCE: 039316/0603
CURRENT APPLICATION NUMBER: US/10/239,958
CURRENT FILING DATE: 2002-09-23
                                                                                                            SOPTWARE: PatentIn Ver. 2.1
SEQ ID NO 102
LENGTH: 16
                                                                                                                                                                   CURRENT FILING DATE: 2002-09-23
PRIOR APPLICATION NUMBER: 09/536,058
PRIOR FILING DATE: 2000-03-23
NUMBER OF SEQ ID NOS: 256
                                                          ORGANISM: Artificial Sequence FEATURE:
                                                                                               TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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131
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US-10-964-195-5

US-60-522-459-11465

US-60-522-459-9037

US-60-522-459-9179

US-60-522-459-12497
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Sequence 11465, A
Sequence 9037, Ap
Sequence 9179, Ap
Sequence 12497, A
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Query Match
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US-60-522-459-11465
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US-60-522-459-11465
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US-10-964-195-5/c
                                                                                                                                                                         Sequence 11465, Application US/60522459
GENERAL INFORMATION:
APPLICANT: ROSETTA GENOMICS LTD
TITLE OF INVENTION: BIOINFORMATICALLY DETECTABLE GROUP OF NOVEL REGULATORY VIRAL AND
TITLE OF INVENTION: VIRAL ASSOCIATED OLIGONUCLEOTIDES AND USES THEREOF
FILE REFERENCE: 52904
CURRENT APPLICATION NUMBER: US/60/522,459
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 15575
SOCTWARE: Patentin version 3.2
SEQ ID NO 11465
LENGTH: 13
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GENERAL INFORMATION:
APPLICANT: Rosenblum et al.
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SEQ ID NO 5
LENGTH: 15
TYPE: DNA
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Best Local Similarity
Matches 14; Conserv
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Best Local 9
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TITLE OF INVENTION: Related Surface Antigens
FILE REFERENCE: D5425CIP2
CURRENT APPLICATION NUMBER: US/10/964,195
CURRENT FILLING DATE: 2004-10-13
PRIOR APPLICATION NUMBER: US/09/320,156
PRIOR FILING DATE: 1999-05-26
PRIOR FILING DATE: 1999-05-26
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE: OTHER INFORMATION: Primer directed towards 5' coding region of Tab OTHER INFORMATION: light chain
                                                                                                                                                               TYPE: RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Artificial Sequence
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Local Similarity 86.7%;
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50.0%;
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Pred. No. 2
                                                                 Mismatches
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RESULT 4 US-60-522-459-9037 " ; Sequence 9037, Appl

Application US/60522459

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RESULT 6
US-60-522-459-12497/c
US-60-522-459-12497/c
US-60-522-459-12497/c
US-60-522-459-12497/c
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US-60-522-459-12497
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US-60-522-459-9179/c
US-60-522-459-9179/c
Sequence 9179, Application US/60522459
; GENERAL INFORMATION:
APPLICANT: ROSETTA GENOMICS LTD
TITLE OF INVENTION: BIOINFORMATICALLY DETECTABLE GROUP OF NOVEL REGULATORY VIRAL AND
TITLE OF INVENTION: VIRAL ASSOCIATED OLIGONUCLEOTIDES AND USES THEREOF
FILE REFERENCE: 52904
CURRENT APPLICATION NUMBER: US/60/522,459
CURRENT APPLICATION NUMBER: US/60/522,459
UNUMBER OF SEQ ID NOS: 15575
SOFTWARE: Patentin version 3.2
SEQ ID NO 9179
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Best Local S
Matches 7
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Matches
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TITLE OF INVENTION: BIOINFORMATICALLY DETECTABLE GROUP OF NOVEL REGULATORY VIRAL.

TITLE OF INVENTION: VIRAL ASSOCIATED OLIGONUCLEOTIDES AND USES THEREOF

FILE REFERENCE: 52904

CURRENT FILING DATE: 2004-10-04

NUMBER OF SEQ ID NOS: 15575

SOFTMARE: PALENTIN VERSION 3.2

SOFTMARE: PALENTIN VERSION 3.2

LENGTH: 13

TYPE: RNA. United.
Query Match 7.5%; Score 9.8; DB 1; Length 13; Best Local Similarity 84.6%; Pred. No. 2.5; Matches 11; Conservative 0; Mismatches 2; Indels
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ORGANISM: Human
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Local Similarity 84.6%;
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Pred. No. 2.
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